API Well No: 43047512430000 Received: 8/13/2010

		DEPARTMENT	ATE OF UTAH OF NATURAL RE F OIL, GAS AND				FORI					
APPLI	CATION FOR	PERMIT TO DRILL	-			1. WELL NAME and	NUMBER NBU 921-25F1BS					
2. TYPE OF WORK DRILL NEW WELL	REENTER P8	kA WELL DEEPE	N WELL			3. FIELD OR WILDCAT NATURAL BUTTES						
4. TYPE OF WELL Gas We	ell Coalb	ed Methane Well: NO				5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES						
6. NAME OF OPERATOR KERR	R-MCGEE OIL & (GAS ONSHORE, L.P.				7. OPERATOR PHO	VE 720 929-6007					
8. ADDRESS OF OPERATOR		Denver, CO, 80217				9. OPERATOR E-MA Kathy.Schne	IL ebeckDulnoan@anad	arko.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		11. MINERAL OWNE		<u> </u>	_	12. SURFACE OWN	RSHIP					
UO 1194 ST 13. NAME OF SURFACE OWNER (if box 12	- 'foo')	FEDERAL () IND	IAN STATE	U	FEE ()	FEDERAL INI	DIAN STATE (
							·	•				
15. ADDRESS OF SURFACE OWNER (if box	12 = 'fee')					16. SURFACE OWN	EK E-MAIL (IT DOX)	.2 = Tee)				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	(if box 12 = 'INDIAN') MULTIPLE FORMATIONS					DRIZONTAL 🛑						
20. LOCATION OF WELL	FC	OTAGES	QTR-QTR		SECTION	TOWNSHIP	RANGE	MERIDIAN				
LOCATION AT SURFACE	2580 FI	NL 1780 FWL	SENW		25	9.0 S	21.0 E	S				
Top of Uppermost Producing Zone	1366 FI	NL 2296 FWL	SENW		25	9.0 S	21.0 E	S				
At Total Depth	1366 FI	NL 2296 FWL	SENW		25	9.0 S	21.0 E	S				
21. COUNTY UINTAH		22. DISTANCE TO N	EAREST LEASE LI 1366	NE (Fe	et)	23. NUMBER OF AC	RES IN DRILLING	JNIT				
		25. DISTANCE TO N (Applied For Drilling		SAME	POOL	26. PROPOSED DEF	T H : 9894 TVD: 9682					
27. ELEVATION - GROUND LEVEL 4932		28. BOND NUMBER	22013542			29. SOURCE OF DR WATER RIGHTS AP		F APPLICABLE				
7772		Δ-	TTACHMENTS									
			ITACHMENTS									
VERIFY THE FOLLOWING	ARE ATTACH	ED IN ACCORDAN	CE WITH THE U	JTAH	OIL AND	GAS CONSERVATI	ON GENERAL RU	ILES				
WELL PLAT OR MAP PREPARED BY	LICENSED SUF	RVEYOR OR ENGINEE	R CO	MPLET	E DRILLING	PLAN						
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGRE	EMENT (IF FEE SURF	ACE) FOR	RM 5. I	F OPERATO	R IS OTHER THAN T	HE LEASE OWNER					
DIRECTIONAL SURVEY PLAN (IF DI	RECTIONALLY	OR HORIZONTALLY	г тог	POGRA	PHICAL MA	Þ						
						00 020-6156						
NAME Danielle Piernot	Т	ITLE Regulatory Analys	st		PHONE 72	.0 929-0130						
NAME Danielle Piernot SIGNATURE		<u> </u>	st		5 <i>,</i> ,							
SIGNATURE		DATE 08/13/2010	st				o.com					

API Well No: 43047512430000 Received: 8/13/2010

	Propo	osed Hole, Casing, ar	nd Cement		
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)	
Prod	7.875	4.5	0	9894	
Pipe	Grade	Length	Weight		
	Grade I-80 Buttress	9894	11.6		Γ
					Γ

API Well No: 43047512430000 Received: 8/13/2010

	Proj	posed Hole, Casing,	and Cement		
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)	
Surf	11	8.625	0	2410	
Pipe	Grade	Length	Weight		
	Grade I-80 LT&C	2410	28.0		
					Т

NBU 921-25F1BS

Pad: NBU 921-25F Surface: 2,580' FNL 1,780' FWL (SE/4NW/4) BHL: 1,366' FNL 2,296' FWL (SE/4NW/4) Section 25 T9S R21E

> Uintah County, Utah Mineral Lease: UO 1194 ST

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. – 2. <u>Estimated Tops of Important Geologic Markers</u>: <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

<u>Formation</u>	<u>Depth</u>	Resource
Uinta	0 – Surface	
Green River	1,479'	
Birds Nest	1,779'	Water
Mahogany	2,156'	Water
Wasatch	4,749'	Gas
Mesaverde	7,460'	Gas
MVU2	8,375'	Gas
MVL1	8,942'	Gas
TVD	9,682'	
TD	9,894'	

3. Pressure Control Equipment (Schematic Attached)

Please refer to the attached Drilling Program.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program.

5. Drilling Fluids Program:

Please refer to the attached Drilling Program.

Evaluation Program:

Please refer to the attached Drilling Program.

7. <u>Abnormal Conditions</u>:

Maximum anticipated bottomhole pressure calculated at 9,682' TVD, approximately equals 6,133 psi (calculated at 0.63 psi/foot).

Maximum anticipated surface pressure equals approximately 4,003 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

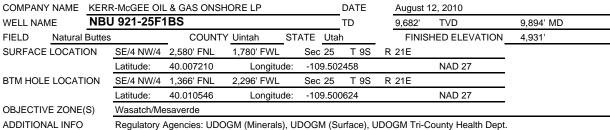
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

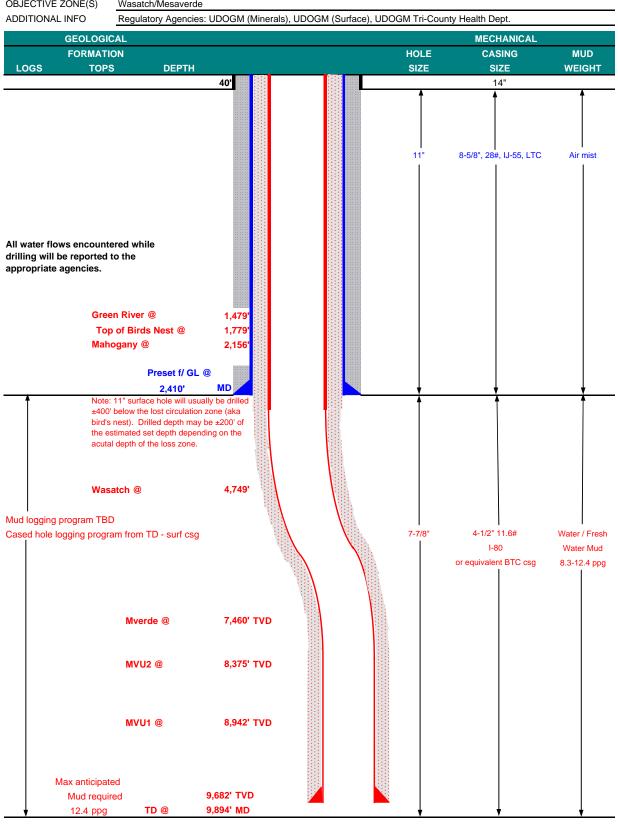
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM







KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

								DESIGN FACTORS		
	SIZE	INTERVAL			WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	C	-40'							
								3,390	1,880	348,000
SURFACE	8-5/8"	0	to	2,410	28.00	IJ-55	LTC	0.81	1.67	5.11
								7,780	6,350	278,000
PRODUCTION	4-1/2"	0	to	9,894	11.60	I-80	BTC	1.89	1.02	2.78

*Burst on suface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.23

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.4 ppg) 0.22 psi/ft = gradient for partially evac wellbore (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 4,003 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 12.4 ppg) 0.63 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 6,133 psi

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1		+ 0.25 pps flocele				
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
		+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water to sur	face, optio	n 2 will be ເ	utilized	
Option 2 LEAD	1,910'	65/35 Poz + 6% Gel + 10 pps gilsonite	180	35%	11.00	3.82
		+ 0.25 pps Flocele + 3% salt BWOW				
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
		+ 0.25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION LEAD	4,244'	Premium Lite II +0.25 pps	310	10%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	5,650'	50/50 Poz/G + 10% salt + 2% gel	1,090	10%	14.30	1.31
		+ 0.1% R-3				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

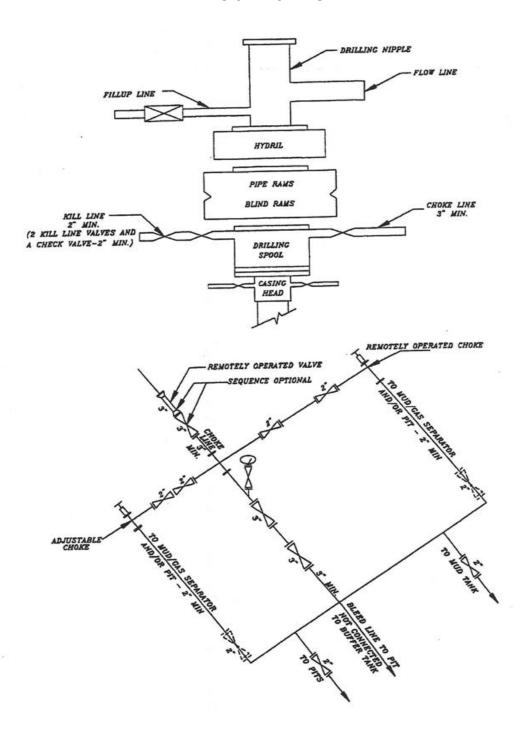
BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

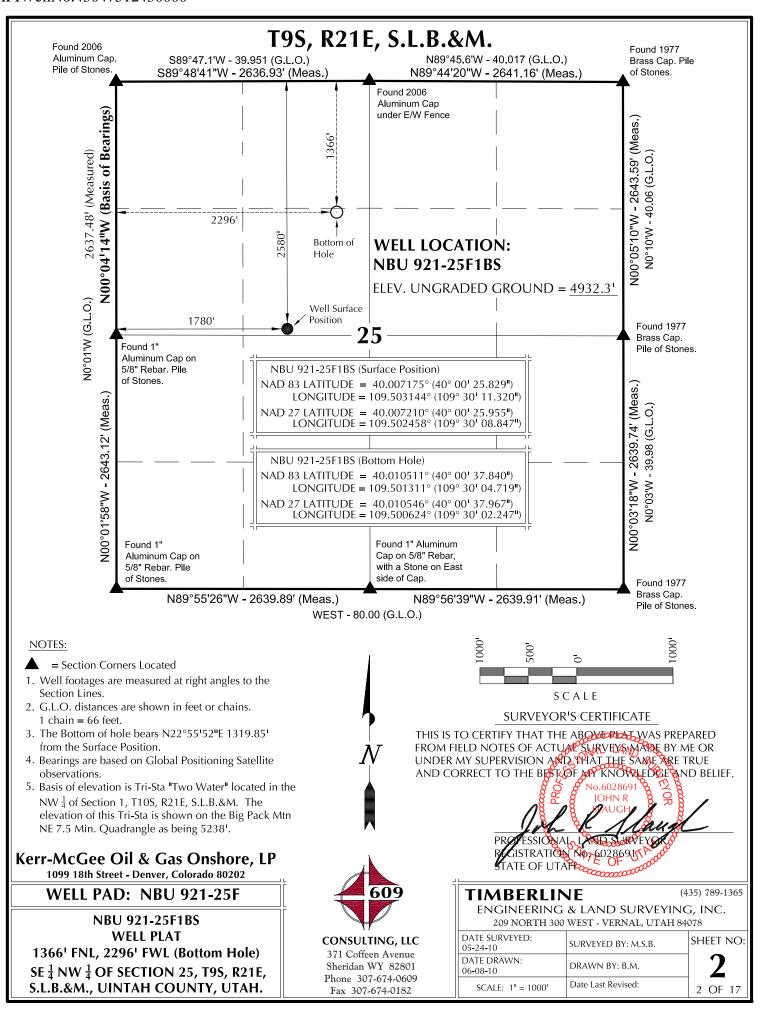
DRILLING ENGINEER:		DATE:	
	John Huycke / Emile Goodwin		
DRILLING SUPERINTENDENT:		DATE:	
	John Merkel / Lovel Young		

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

EXHIBIT A NBU 921-25F1BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



			SURFA	ACE POSITIO)N							Re	оттом но	LE		
WELL NAME		AD83		NA	D27					NAD				NAD2		
	LATITUDE	LONGITU		LATITUDE			FOOT		LATIT			GITUDE	LATITUD			FOOTAGES
NBU 921-25F1CS	40°00'25.918 40.007199°	3" 109°30'11 109.50312		0°00'26.044" 0.007234°	109°30' 109.502	08.794" 2443°	2571' 1784'		40°00'3 40.0094		109°30 109.50	0'05.186" 1441°	40°00'34.1 40.009481		09°30'02.714" 09.500754°	1754' FNL 2259' FWL
NBU	40°00'25.829		.320" 40	0°00'25.955"		08.847"	2580		40°00'3	37.840"		0'04.719"	40°00'37.9	67" 10	09°30'02.247"	1366' FNL
921-25F1BS	40.007175°	109.50314		0.007210°	109.502		1780		40.0105		109.50		40.010546		09.500624°	2296¹ FWL
NBU 921-25F3AS	40°00'25.738 40.007149°	3" 109°30'11 109.50316		0°00'25.864" 0.007185°	109°30' 109.502	'08.902" 2473°	2589' 1776'	I	40°00'3		109°30 109.50)'09.729" 2702°	40°00'31.3 40.008709		09°30'07.256" 09.502016°	2034' FNL 1905' FWL
NBU	40°00'25.649)" 109°30'11	.428" 40	0°00'25.776"	109°30'	08.956"	25981	FNL	40°00'2	26.997"	109°30)'13.278"	40°00'27.1	24" 10	09°30'10.806"	2461 FNL
921-25F3CS NBU	40.007125° 40°00'25.560	109.50317		0.007160° 0°00'25.687"	109.502	2488° '09.009"	1772 ¹ 2607 ¹		40.0074 40°00'2		109.50	3688° 0'21.740"	40.007534 40°00'24.8		09.503002° 09°30'19.268"	1628' FWL 2597' FSL
921-25L1BS	40.007100°	109.50318		0.007135°	109.502	2503°	1768'	FWL	40.0068	869°	109.50	6039°	40.006904		09.505352°	969' FWL
M/FILL NIAAA	NORTH	FACT	14/51 -	RELATIVE									14/511	144-	NORTH	FACT
WELL NAME NBU	NORTH	EAST	WELL N		ORTH	EAS		WELL NBU	NAME	NOR ⁻		EAST	NBU NBU	IAME	NORTH	EAST
921-25F1CS	818.4'	473.5'	921-25	F1BS	215.5'	514.2		921-25	F3AS	555.	.4	128.31	921-251	3CS	136.5	-143.91
WELL NAME	NORTH	EAST							,	1.	<u> </u>	1				
NBU 921-25L1BS	-83.7'	-798.5'								4						
	S84°0	ottom of ole 0'57"W - 0 Bottom z=264.01	802.9 Hole)	BA O S. G	ASIS OF F THE N L.B.&M. LOBAL BSERVA	BEARIN IW ¹ / ₄ OF WHICH POSITIO	NGS IS SECTH IS TO DNING	THE NECTION 2	8U 921. 921.251 WEST LI 15, T9S, FROM ELLITE	7-25F1 25F1 25F1 5F3CS 1BS	20° 50° 50° 50° 50° 50° 50° 50° 50° 50° 5		30,			.09
_	8th Street - D	enver, Colo	rado 802	202	L r									A L E		
WEL	L PAD -	NBU 92	21-25	5F			6 (9				ERLI				35) 789-1365
WELI	PAD INT	ERFEREN	ICE PI	LAT	Ī					E					JRVEYINC	
	WELLS - NB			•		CONIC	17	C !!	C	DATE	ZU9 I SURVE				AL, UTAH 840	
	921-25F1BS	•				CONSU 371 Co		,		05-24	4-10		SURVEY	ED BY:	M.S.B.	SHEET NO:
	21-25F3CS					Sherida				DATE 06-08	E DRAW B-10	N:	DRAWN	BY: B.	М.	6
	TED IN SEC					Phone	307-67	4-0609			3-10 CALE: 1	11 _ 601	Date Las	t Revise	ed:	U
5.L.B.8	km., UINTA	AH COUN	11, UI/	ΑΠ.		Fax 3	07-674	-0182			CALE: I	- 00	1 240			6 OF 17

EXISTING GRADE @ CENTER OF WELL PAD = 4933.1'
FINISHED GRADE ELEVATION = 4930.9'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1
TOTAL WELL PAD AREA = 3.64 ACRES
TOTAL DAMAGE AREA = 6.25 ACRES
SHRINKAGE FACTOR = 1.10

Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 921-25F

SWELL FACTOR = 1.00

WELL PAD - LOCATION LAYOUT NBU 921-25F1CS, NBU 921-25F1BS, NBU 921-25F3AS, NBU 921-25F3CS & NBU 921-25L1BS LOCATED IN SECTION 25, T9S, R21E S.L.B.&M., UINTAH COUNTY, UTAH



Sheridan, WY 82801

Phone 307-674-0609

Fax 307-674-0182

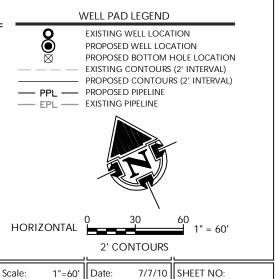
WELL PAD QUANTITIES

TOTAL CUT FOR WELL PAD = 25,883 C.Y. TOTAL FILL FOR WELL PAD = 3,310 C.Y. TOPSOIL @ 6" DEPTH = 2,938 C.Y. EXCESS MATERIAL = 22,573 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT +/- 11,560 CY RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 44,420 BARRELS

TIMBERLINE (435) 789-1365 ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

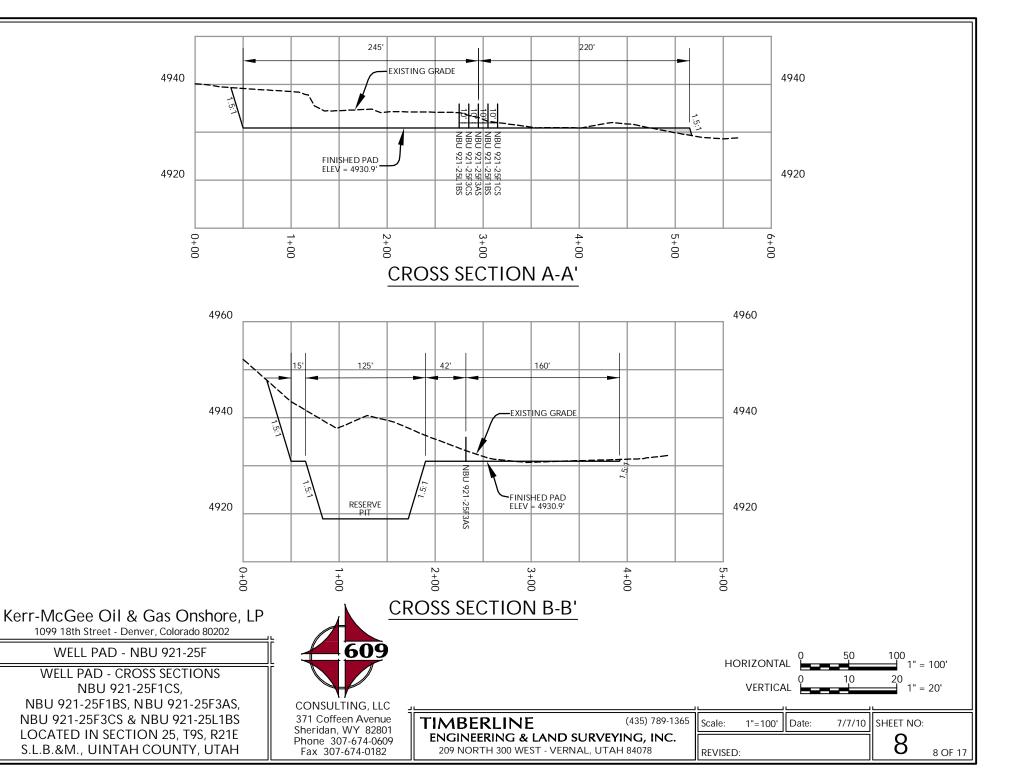


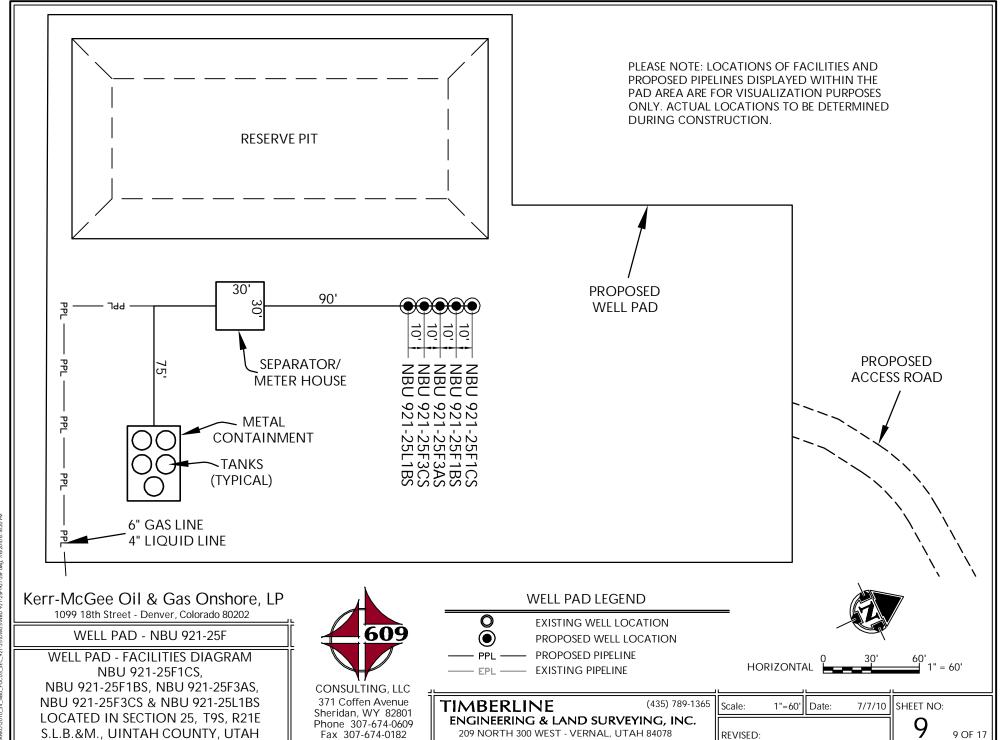
7 OF 17

REVISED:

VARKOVZOTO_S4_NBU_FOCUS_SEC_92T-Z5\DWGS\NBU 92T-25F\92F-25F\3Mg, // // Z0TO







'APIWeIINo:43047512430000'

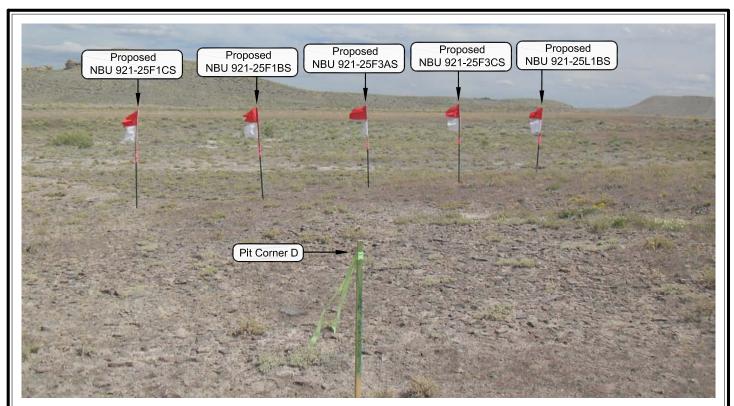


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

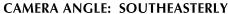




PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: WESTERLY

Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 921-25F

LOCATION PHOTOS NBU 921-25F1CS, NBU 921-25F1BS, NBU 921-25F3AS, NBU 921-25F3CS & NBU 921-25L1BS LOCATED IN SECTION 25, T9S, R21E, S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC 371 Coffeen Avenue

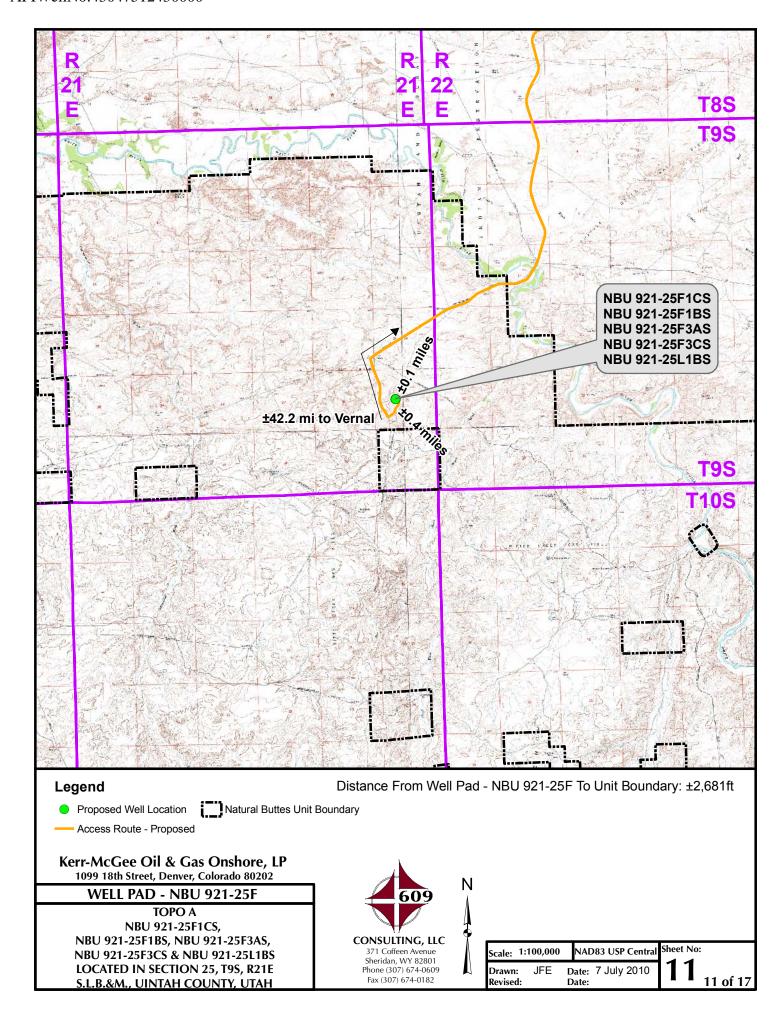
Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

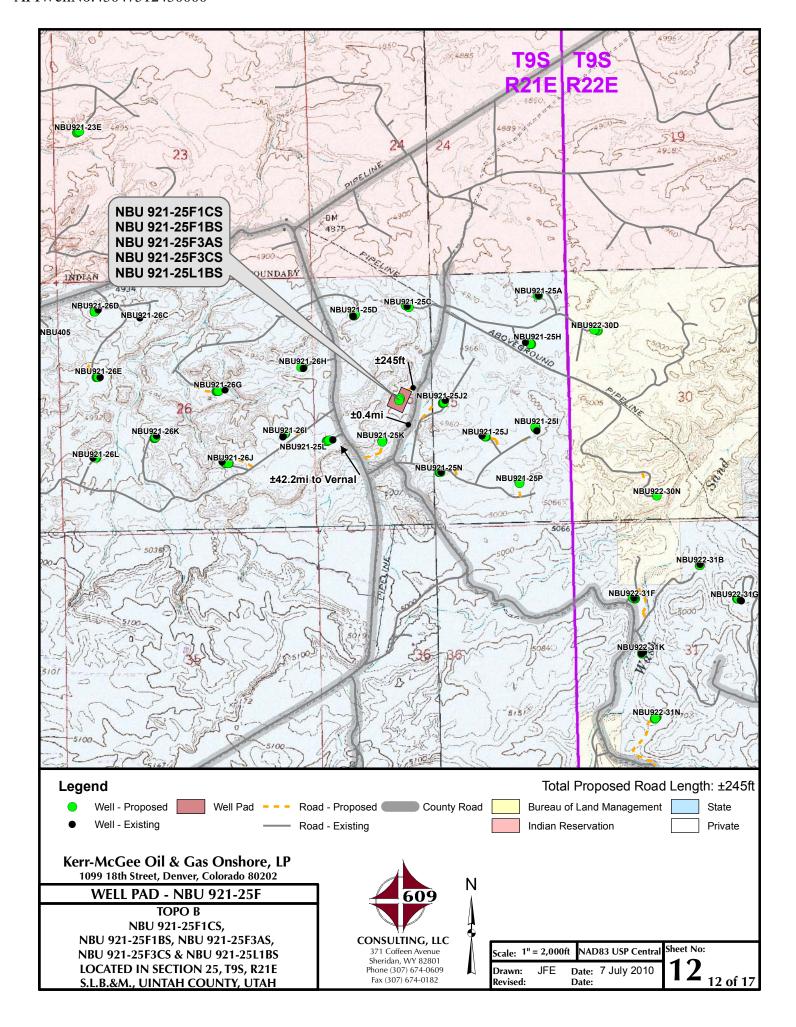
TIMBERLINE

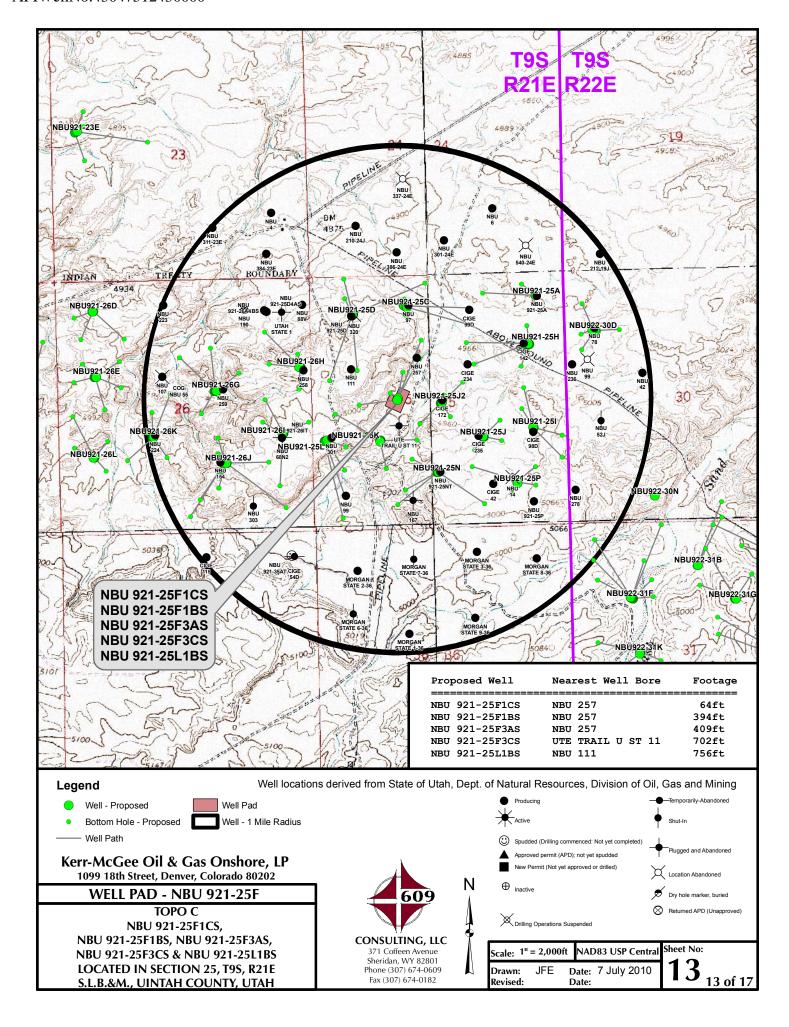
(435) 789-1365

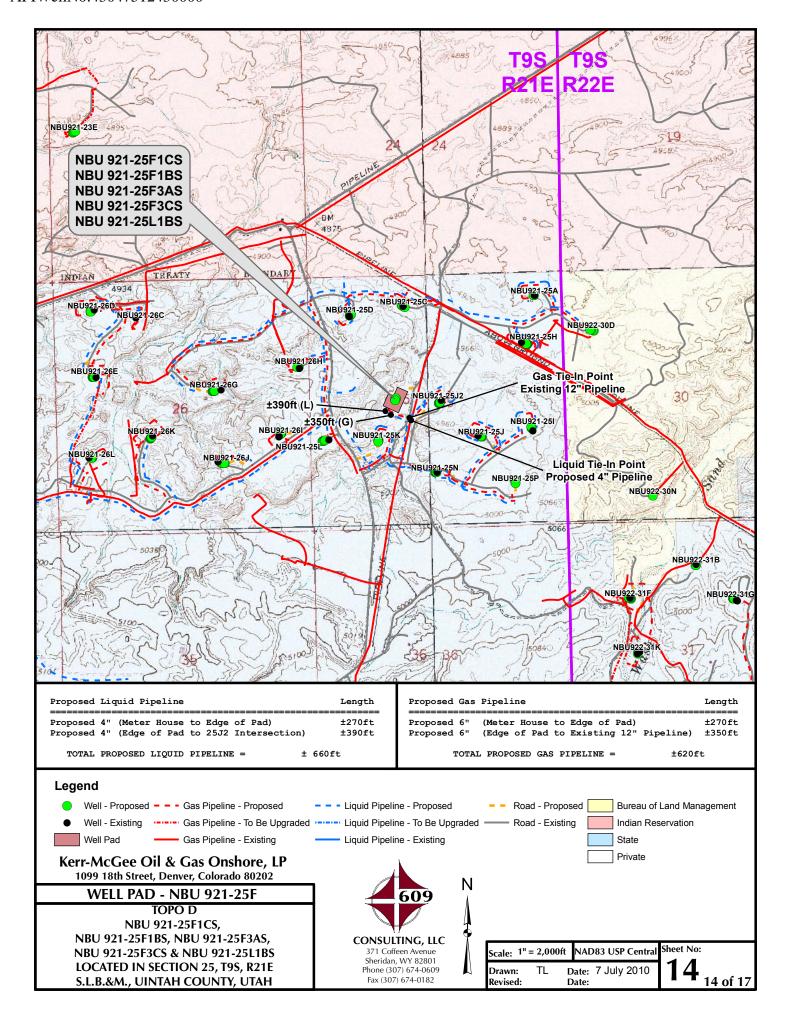
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

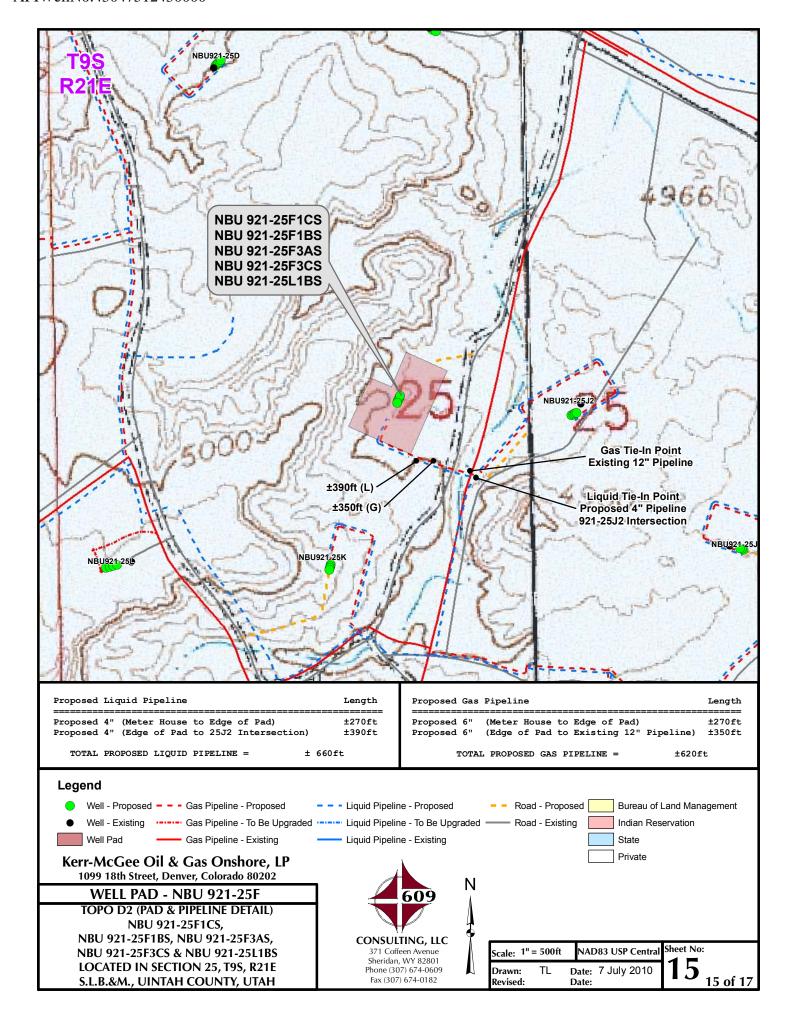
DATE PHOTOS TA 05-24-10	AKEN: PHOTOS TAKEN BY: M.S.B.	SHEET NO:
DATE DRAWN: 06-09-10	DRAWN BY: B.M.	10
Date Last Revised:		10 OF 17

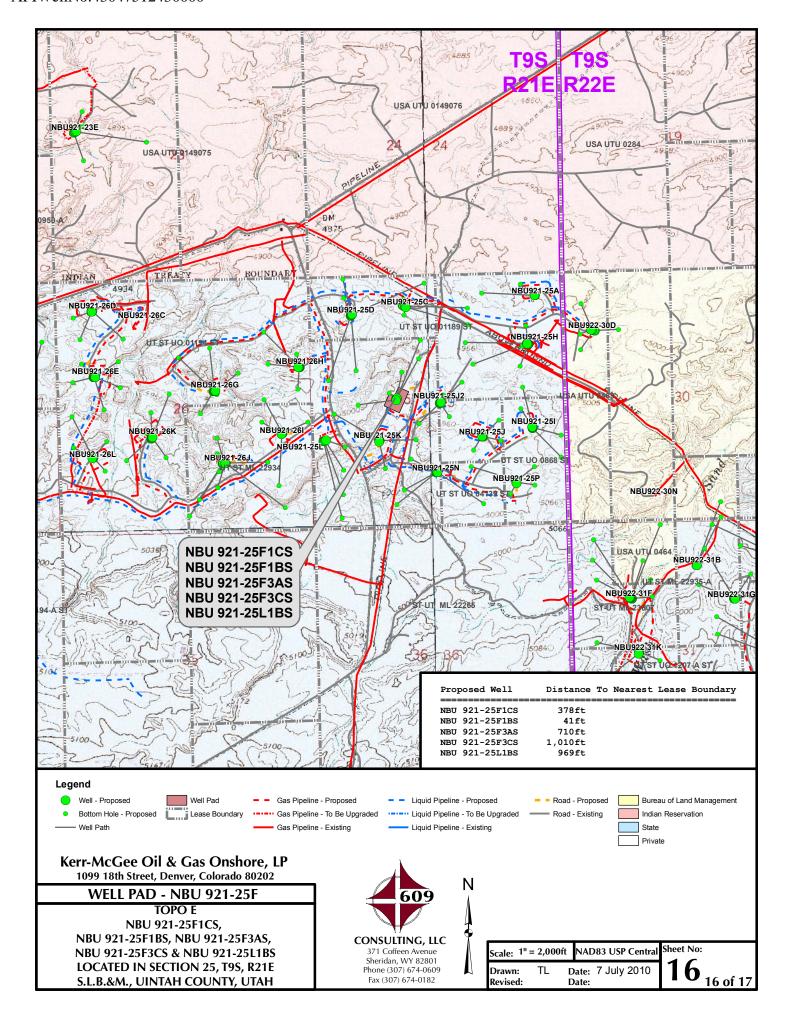












Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 921-25F WELLS – NBU 921-25F1CS, NBU 921-25F1BS, NBU 921-25F3AS, NBU 921-25F3CS & NBU 921-25L1BS Section 25, T9S, R21E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly then southeasterly direction along the Glen Bench Road approximately 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 0.4 miles to the proposed access road to the west. Exit left and follow the road flags in a southwesterly direction approximately 245 feet to the proposed pad.

Total distance from Vernal, Utah to the proposed well location is approximately 42.6 miles in a southerly direction.

'APIWellNo:43047512430000'

Scientific Drilling

Rocky Mountain Operations

6000

6600

-600

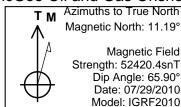
Project: Uintah County, UT UTM12

Site: NBU 921-25F Pad Well: NBU 921-25F1BS

Wellbore: OH
Design: Plan #1



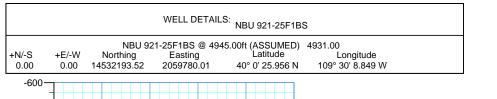
Kerr McGee Oil and Gas Onshore LP



Plan: Plan #1 (NBU 921-25F1BS/OH)

Created By: Robert H. Scott Date: 14:08, July 29 2010

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)



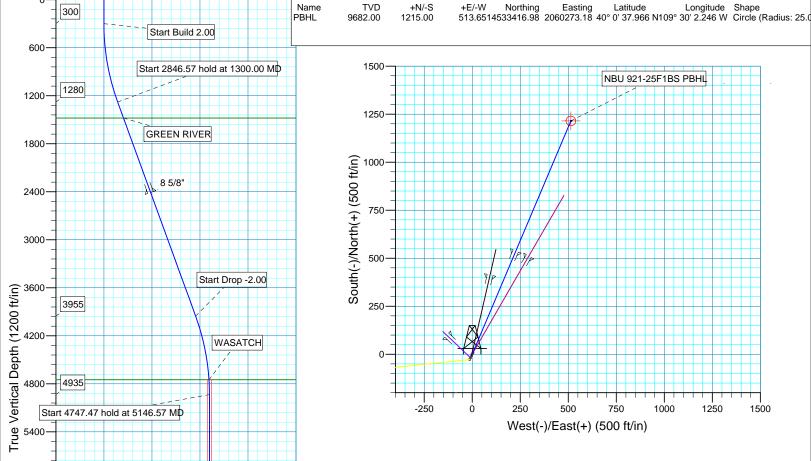
1800

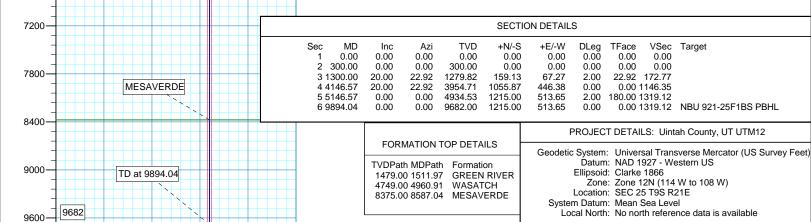
2400

600

1200

Vertical Section at 22.92° (1200 ft/in)







Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25F Pad NBU 921-25F1BS OH

Plan: Plan #1

Standard Planning Report

29 July, 2010







Database: EDM 2003.16 Single User Db

Company: Kerr McGee Oil and Gas Onshore LP Project: Uintah County, UT UTM12

 Site:
 NBU 921-25F Pad

 Well:
 NBU 921-25F1BS

 Wellbore:
 OH

Design:

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

True

Minimum Curvature

Project Uintah County, UT UTM12

Plan #1

Map System: Universal Transverse Mercator (US Survey Fee System Datum: Mean Sea Level

Geo Datum: NAD 1927 - Western US
Map Zone: Zone 12N (114 W to 108 W)

Site NBU 921-25F Pad, SEC 25 T9S R21E

14,532,166.00ft Northing: 40° 0' 25.686 N Site Position: Latitude: Lat/Long 2,059,767.87ft 109° 30' 9.011 W From: Easting: Longitude: 0.00 ft 0.96° **Position Uncertainty:** Slot Radius: in **Grid Convergence:**

Well NBU 921-25F1BS, 2580' FNL 1780' FWL

 Well Position
 +N/-S
 0.00 ft
 Northing:
 14,532,193.52 ft
 Latitude:
 40° 0′ 25.956 N

 +E/-W
 0.00 ft
 Easting:
 2,059,780.01 ft
 Longitude:
 109° 30′ 8.849 W

Position Uncertainty 0.00 ft Wellhead Elevation: ft Ground Level: 4,931.00 ft

Wellbore OH

Magnetics Model Name Sample Date Declination Oip Angle Field Strength (°) (°) (nT)

IGRF2010 07/29/2010 11.19 65.90 52,420

Design Plan #1

Audit Notes:

Version:Phase:PLANTie On Depth:0.00

 Vertical Section:
 Depth From (TVD) (ft)
 +N/-S (ft)
 +E/-W (ft)
 Direction (°)

 0.00
 0.00
 0.00
 0.00
 22.92

Plan Sections	s									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	22.92	1,279.82	159.13	67.27	2.00	2.00	0.00	22.92	
4,146.57	20.00	22.92	3,954.71	1,055.87	446.38	0.00	0.00	0.00	0.00	
5,146.57	0.00	0.00	4,934.53	1,215.00	513.65	2.00	-2.00	0.00	180.00	
9,894.04	0.00	0.00	9,682.00	1,215.00	513.65	0.00	0.00	0.00	0.00	NBU 921-25F1BS F





Database: Company:

EDM 2003.16 Single User Db

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12
Site: NBU 921-25F Pad
Well: NBU 921-25F1BS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

True

gn: Pi	an # 1								
ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 400.00	d 2.00 2.00	22.92	399.98	1.61	0.68	1.75	2.00	2.00	0.00
500.00 600.00 700.00 800.00 900.00	4.00 6.00 8.00 10.00 12.00	22.92 22.92 22.92 22.92 22.92	499.84 599.45 698.70 797.47 895.62	6.43 14.45 25.68 40.09 57.66	2.72 6.11 10.86 16.95 24.38	6.98 15.69 27.88 43.52 62.60	2.00 2.00 2.00 2.00 2.00 2.00	2.00 2.00 2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00
1,000.00	14.00	22.92	993.06	78.38	33.14	85.10	2.00	2.00	0.00
1,100.00	16.00	22.92	1,089.64	102.22	43.21	110.98	2.00	2.00	0.00
1,200.00	18.00	22.92	1,185.27	129.15	54.60	140.21	2.00	2.00	0.00
1,300.00	20.00	22.92	1,279.82	159.13	67.27	172.77	2.00	2.00	0.00
Start 2846 1,400.00	5.57 hold at 130 20.00	00.00 MD 22.92	1,373.78	190.63	80.59	206.97	0.00	0.00	0.00
1,500.00	20.00	22.92	1,467.75	222.14	93.91	241.17	0.00	0.00	0.00
1,511.97	20.00	22.92	1,479.00	225.91	95.50	245.27	0.00	0.00	0.00
GREEN R 1.600.00	IVER 20.00	22.02	1,561.72	253.64	107.00	275.37	0.00	0.00	0.00
1,700.00 1,800.00	20.00 20.00 20.00	22.92 22.92 22.92	1,655.69 1,749.66	285.14 316.64	107.23 120.55 133.86	309.58 343.78	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
1,900.00	20.00	22.92	1,843.63	348.15	147.18	377.98	0.00	0.00	0.00
2,000.00	20.00	22.92	1,937.60	379.65	160.50	412.18	0.00	0.00	0.00
2,100.00	20.00	22.92	2,031.57	411.15	173.82	446.38	0.00	0.00	0.00
2,200.00	20.00	22.92	2,125.54	442.65	187.14	480.59	0.00	0.00	0.00
2,300.00	20.00	22.92	2,219.51	474.16	200.45	514.79	0.00	0.00	0.00
2,400.00	20.00	22.92	2,313.48	505.66	213.77	548.99	0.00	0.00	0.00
2,500.00	20.00	22.92	2,407.45	537.16	227.09	583.19	0.00	0.00	0.00
2,502.72	20.00	22.92	2,410.00	538.02	227.45	584.12	0.00	0.00	0.00
8 5/8" 2,600.00 2,700.00	20.00	22.92	2,501.42	568.66	240.41	617.39	0.00	0.00	0.00
	20.00	22.92	2,595.39	600.17	253.73	651.60	0.00	0.00	0.00
2,800.00	20.00	22.92	2,689.35	631.67	267.04	685.80	0.00	0.00	0.00
2,900.00	20.00	22.92	2,783.32	663.17	280.36	720.00	0.00	0.00	0.00
3,000.00	20.00	22.92	2,877.29	694.68	293.68	754.20	0.00	0.00	0.00
3,100.00	20.00	22.92	2,971.26	726.18	307.00	788.40	0.00	0.00	0.00
3,200.00	20.00	22.92	3,065.23	757.68	320.32	822.61	0.00	0.00	0.00
3,300.00	20.00	22.92	3,159.20	789.18	333.63	856.81	0.00	0.00	0.00
3,400.00	20.00	22.92	3,253.17	820.69	346.95	891.01	0.00	0.00	0.00
3,500.00	20.00	22.92	3,347.14	852.19	360.27	925.21	0.00	0.00	0.00
3,600.00	20.00	22.92	3,441.11	883.69	373.59	959.41	0.00	0.00	0.00
3,700.00	20.00	22.92	3,535.08	915.19	386.90	993.62	0.00	0.00	0.00
3,800.00	20.00	22.92	3,629.05	946.70	400.22	1,027.82	0.00	0.00	0.00
3,900.00	20.00	22.92	3,723.02	978.20	413.54	1,062.02	0.00	0.00	0.00
4,000.00	20.00	22.92	3,816.99	1,009.70	426.86	1,096.22	0.00	0.00	0.00
4,100.00	20.00	22.92	3,910.95	1,041.20	440.18	1,130.42	0.00	0.00	0.00
4,146.57	20.00	22.92	3,954.71	1,055.87	446.38	1,146.35	0.00	0.00	0.00
Start Drop									
4,200.00	18.93	22.92	4,005.09	1,072.27	453.31	1,164.16	2.00	-2.00	0.00
4,300.00	16.93	22.92	4,100.23	1,100.63	465.30	1,194.94	2.00	-2.00	0.00
4,400.00	14.93	22.92	4,196.38	1,125.91	475.99	1,222.39	2.00	-2.00	0.00





Database: Company:

EDM 2003.16 Single User Db

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12
Site: NBU 921-25F Pad
Well: NBU 921-25F1BS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

True

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.00	12.93	22.92	4,293.44	1,148.08	485.36	1,246.47	2.00	-2.00	0.00
4,600.00	10.93	22.92	4,391.27	1,167.13	493.41	1,267.14	2.00	-2.00	0.00
4,700.00	8.93	22.92	4,489.77	1,183.01	500.13	1,284.38	2.00	-2.00	0.00
4,800.00	6.93	22.92	4,588.81	1,195.72	505.50	1,298.18	2.00	-2.00	0.00
4,900.00	4.93	22.92	4,688.27	1,205.24	509.52	1,308.52	2.00	-2.00	0.00
4,960.91	3.71	22.92	4,749.00	1,209.47	511.31	1,313.11	2.00	-2.00	0.00
WASATCH 5,000.00	I 2.93	22.92	4,788.03	1,211.55	512.19	1,315.37	2.00	-2.00	0.00
5,100.00	0.93	22.92	4,887.96	1,214.66	513.51	1,318.74	2.00	-2.00	0.00
5,146.57 Start 4747	0.00 .47 hold at 514	0.00 6 57 MD	4,934.53	1,215.00	513.65	1,319.12	2.00	-2.00	0.00
5,200.00	0.00	0.00	4,987.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
5,300.00	0.00	0.00	5,087.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
5,400.00	0.00	0.00	5,187.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
5,500.00	0.00	0.00	5,287.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
5,600.00	0.00	0.00	5,387.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
5,700.00	0.00	0.00	5,487.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
5,800.00	0.00	0.00	5,587.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
5,900.00	0.00	0.00	5,687.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,000.00	0.00	0.00	5,787.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,100.00	0.00	0.00	5,887.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,200.00	0.00	0.00	5,987.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,300.00	0.00	0.00	6,087.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,400.00	0.00	0.00	6,187.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,500.00	0.00	0.00	6,287.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,600.00	0.00	0.00	6,387.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,700.00	0.00	0.00	6,487.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,800.00	0.00	0.00	6,587.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
6,900.00	0.00	0.00	6,687.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,000.00	0.00	0.00	6,787.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,100.00	0.00	0.00	6,887.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,200.00	0.00	0.00	6,987.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,300.00	0.00	0.00	7,087.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,400.00	0.00	0.00	7,187.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,500.00	0.00	0.00	7,287.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,600.00	0.00	0.00	7,387.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,700.00	0.00	0.00	7,487.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,800.00	0.00	0.00	7,587.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
7,900.00	0.00	0.00	7,687.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,000.00	0.00	0.00	7,787.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,100.00	0.00	0.00	7,887.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,200.00	0.00	0.00	7,987.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,300.00	0.00	0.00	8,087.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,400.00	0.00	0.00	8,187.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,500.00	0.00	0.00	8,287.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,587.04	0.00	0.00	8,375.00	1,215.00	513.65	1,319.12	0.00	0.00	0.00
MESAVER 8,600.00	DE 0.00	0.00	8,387.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
8,700.00 8,800.00	0.00 0.00 0.00	0.00 0.00 0.00	8,487.96 8,587.96	1,215.00 1,215.00 1,215.00	513.65 513.65	1,319.12 1,319.12 1,319.12	0.00 0.00	0.00 0.00	0.00 0.00 0.00
8,900.00	0.00	0.00	8,687.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
9,000.00	0.00	0.00	8,787.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00
9,100.00	0.00	0.00	8,887.96	1,215.00	513.65	1,319.12	0.00	0.00	0.00



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12 NBU 921-25F Pad NBU 921-25F1BS OH

Plan: Plan #1

Standard Planning Report - Geographic

29 July, 2010







EDM 2003.16 Single User Db Database:

Company: Kerr McGee Oil and Gas Onshore LP Project: Uintah County, UT UTM12 NBU 921-25F Pad

Well: NBU 921-25F1BS Wellbore: OH Plan #1 Design:

Site:

Site

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

22.92

True

Minimum Curvature

Project Uintah County, UT UTM12

Map System: Universal Transverse Mercator (US Survey Fee System Datum: Mean Sea Level

0.00

NAD 1927 - Western US Geo Datum: Map Zone: Zone 12N (114 W to 108 W)

NBU 921-25F Pad, SEC 25 T9S R21E

14,532,166.00ft Site Position: Northing: Latitude: 40° 0' 25.686 N From: Lat/Long Easting: 2,059,767.87ft Longitude: 109° 30' 9.011 W **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.96°

Well NBU 921-25F1BS, 2580' FNL 1780' FWL

Well Position +N/-S 0.00 ft Northing: 14,532,193.52 ft Latitude: 40° 0' 25.956 N +E/-W 0.00 ft Easting: 2,059,780.01 ft Longitude: 109° 30' 8.849 W **Position Uncertainty Ground Level:** 0.00 ft Wellhead Elevation: ft 4,931.00 ft

Wellbore ОН **Magnetics Model Name** Sample Date **Declination Dip Angle** Field Strength (°) (°) (nT) IGRF2010 07/29/2010 65.90 52,420 11.19

Plan #1 Design **Audit Notes:** 0.00 **PLAN** Version: Phase: Tie On Depth: **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°)

0.00

0.00

Plan Section	s									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	22.92	1,279.82	159.13	67.27	2.00	2.00	0.00	22.92	
4,146.57	20.00	22.92	3,954.71	1,055.87	446.38	0.00	0.00	0.00	0.00	
5,146.57	0.00	0.00	4,934.53	1,215.00	513.65	2.00	-2.00	0.00	180.00	
9,894.04	0.00	0.00	9,682.00	1,215.00	513.65	0.00	0.00	0.00	0.00	NBU 921-25F1BS F





Database: Company:

EDM 2003.16 Single User Db

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12
Site: NBU 921-25F Pad
Well: NBU 921-25F1BS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

True

Design.									
Planned Surv	ey								
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
									<u> </u>
0.00		0.00	0.00	0.00	0.00	14,532,193.52	2,059,780.01	40° 0' 25.956 N	109° 30' 8.849 W
100.00 200.00		0.00 0.00	100.00 200.00	0.00 0.00	0.00 0.00	14,532,193.52 14,532,193.52	2,059,780.01 2,059,780.01	40° 0' 25.956 N 40° 0' 25.956 N	109° 30' 8.849 W 109° 30' 8.849 W
300.00		0.00	300.00	0.00	0.00	14,532,193.52	2,059,780.01	40° 0' 25.956 N	109° 30' 8.849 W
	uild 2.00	0.00	300.00	0.00	0.00	14,002,100.02	2,000,700.01	40 0 20.00014	100 00 0.040 00
400.00		22.92	399.98	1.61	0.68	14,532,195.14	2,059,780.67	40° 0' 25.972 N	109° 30' 8.840 W
500.00		22.92	499.84	6.43	2.72	14,532,199.99	2,059,782.62	40° 0' 26.020 N	109° 30' 8.814 W
600.00		22.92	599.45	14.45	6.11	14,532,208.08	2,059,785.88	40° 0' 26.099 N	109° 30' 8.770 W
700.00		22.92	698.70	25.68	10.86	14,532,219.38	2,059,790.44	40° 0' 26.210 N	109° 30' 8.709 W
800.00	10.00	22.92	797.47	40.09	16.95	14,532,233.89	2,059,796.29	40° 0' 26.352 N	109° 30' 8.631 W
900.00	12.00	22.92	895.62	57.66	24.38	14,532,251.58	2,059,803.42	40° 0' 26.526 N	109° 30' 8.535 W
1,000.00		22.92	993.06	78.38	33.14	14,532,272.45	2,059,811.83	40° 0' 26.731 N	109° 30' 8.423 W
1,100.00		22.92	1,089.64	102.22	43.21	14,532,296.45	2,059,821.50	40° 0' 26.966 N	109° 30′ 8.293 W
1,200.00		22.92	1,185.27	129.15	54.60	14,532,323.56	2,059,832.43	40° 0' 27.233 N	109° 30' 8.147 W
1,300.00		22.92	1,279.82	159.13	67.27	14,532,353.76	2,059,844.60	40° 0' 27.529 N	109° 30' 7.984 W
	846.57 hold			400.00	00.50	4.4.500.005.40	0.050.057.00	400 01 07 0 40 N	4000 001 7 040 W
1,400.00		22.92	1,373.78	190.63	80.59	14,532,385.48	2,059,857.39	40° 0' 27.840 N	109° 30' 7.813 W
1,500.00		22.92 22.92	1,467.75 1,479.00	222.14 225.91	93.91 95.50	14,532,417.20 14,532,421.00	2,059,870.18 2,059,871.71	40° 0' 28.152 N 40° 0' 28.189 N	109° 30' 7.642 W 109° 30' 7.621 W
1,511.97	I RIVER	22.92	1,479.00	223.91	95.50	14,552,421.00	2,039,671.71	40 0 20.109 N	109 30 7.021 W
1,600.00		22.92	1,561.72	253.64	107.23	14,532,448.92	2,059,882.96	40° 0' 28.463 N	109° 30' 7.471 W
1,700.00		22.92	1,655.69	285.14	120.55	14,532,480.65	2,059,895.75	40° 0' 28.774 N	109° 30' 7.299 W
1,800.00		22.92	1,749.66	316.64	133.86	14,532,512.37	2,059,908.54	40° 0' 29.086 N	109° 30' 7.128 W
1,900.00		22.92	1,843.63	348.15	147.18	14,532,544.09	2,059,921.32	40° 0' 29.397 N	109° 30' 6.957 W
2,000.00		22.92	1,937.60	379.65	160.50	14,532,575.81	2,059,934.11	40° 0' 29.709 N	109° 30' 6.786 W
2,100.00		22.92	2,031.57	411.15	173.82	14,532,607.53	2,059,946.90	40° 0' 30.020 N	109° 30' 6.615 W
2,200.00	20.00	22.92	2,125.54	442.65	187.14	14,532,639.26	2,059,959.68	40° 0' 30.331 N	109° 30' 6.443 W
2,300.00	20.00	22.92	2,219.51	474.16	200.45	14,532,670.98	2,059,972.47	40° 0' 30.643 N	109° 30' 6.272 W
2,400.00		22.92	2,313.48	505.66	213.77	14,532,702.70	2,059,985.26	40° 0' 30.954 N	109° 30' 6.101 W
2,500.00		22.92	2,407.45	537.16	227.09	14,532,734.42	2,059,998.04	40° 0' 31.266 N	109° 30' 5.930 W
2,502.72	20.00	22.92	2,410.00	538.02	227.45	14,532,735.28	2,059,998.39	40° 0' 31.274 N	109° 30' 5.925 W
8 5/8"									
2,600.00		22.92	2,501.42	568.66	240.41	14,532,766.14	2,060,010.83	40° 0' 31.577 N	109° 30' 5.759 W
2,700.00		22.92	2,595.39	600.17	253.73	14,532,797.87	2,060,023.62	40° 0' 31.888 N	109° 30' 5.588 W
2,800.00		22.92	2,689.35 2,783.32	631.67	267.04	14,532,829.59	2,060,036.40	40° 0' 32.200 N 40° 0' 32.511 N	109° 30′ 5.416 W
2,900.00 3,000.00		22.92 22.92	2,763.32 2,877.29	663.17 694.68	280.36 293.68	14,532,861.31 14,532,893.03	2,060,049.19 2,060,061.98	40° 0' 32.822 N	109° 30' 5.245 W 109° 30' 5.074 W
3,100.00		22.92	2,971.26	726.18	307.00	14,532,924.75	2,060,074.76	40° 0' 33.134 N	109° 30′ 3.074 W
3,200.00		22.92	3,065.23	757.68	320.32	14,532,956.47	2,060,087.55	40° 0' 33.445 N	109° 30' 4.732 W
3,300.00		22.92	3,159.20	789.18	333.63	14,532,988.20	2,060,100.34	40° 0' 33.757 N	109° 30' 4.560 W
3,400.00		22.92	3,253.17	820.69	346.95	14,533,019.92	2,060,113.12	40° 0' 34.068 N	109° 30' 4.389 W
3,500.00		22.92	3,347.14	852.19	360.27	14,533,051.64	2,060,125.91	40° 0' 34.379 N	109° 30' 4.218 W
3,600.00		22.92	3,441.11	883.69	373.59	14,533,083.36	2,060,138.70	40° 0' 34.691 N	109° 30' 4.047 W
3,700.00	20.00	22.92	3,535.08	915.19	386.90	14,533,115.08	2,060,151.48	40° 0' 35.002 N	109° 30' 3.876 W
3,800.00		22.92	3,629.05	946.70	400.22	14,533,146.81	2,060,164.27	40° 0' 35.314 N	109° 30′ 3.704 W
3,900.00		22.92	3,723.02	978.20	413.54	14,533,178.53	2,060,177.06	40° 0' 35.625 N	109° 30′ 3.533 W
4,000.00		22.92	3,816.99	1,009.70	426.86	14,533,210.25	2,060,189.84	40° 0' 35.936 N	109° 30' 3.362 W
4,100.00		22.92	3,910.95	1,041.20	440.18	14,533,241.97	2,060,202.63	40° 0' 36.248 N	109° 30' 3.191 W
4,146.57		22.92	3,954.71	1,055.87	446.38	14,533,256.74	2,060,208.58	40° 0' 36.393 N	109° 30' 3.111 W
	rop -2.00	60.00	4.005.05	4 070 07	450.04	44.500.070.00	0.000.045.03	400 01 00 555 1:	4000 001 0 000 111
4,200.00		22.92	4,005.09	1,072.27	453.31	14,533,273.26	2,060,215.24	40° 0' 36.555 N	109° 30' 3.022 W
4,300.00 4,400.00		22.92 22.92	4,100.23	1,100.63	465.30 475.99	14,533,301.81	2,060,226.75	40° 0' 36.835 N 40° 0' 37.085 N	109° 30' 2.868 W 109° 30' 2.731 W
4,400.00	14.93	22.92	4,196.38	1,125.91	410.99	14,533,327.27	2,060,237.01	N COU.1C U U+	108 30 2.731 W





Database: EDM 20 Company: Kerr Mo

EDM 2003.16 Single User Db

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12
Site: NBU 921-25F Pad
Well: NBU 921-25F1BS

Well: NBU 92
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

True

Design:	Plan #1								
Planned Surv	/ev								
i laillieu Sur	re y								
Measured			Vertical			Мар	Мар		
Depth	Inclination		Depth	+N/-S	+E/-W	Northing	Easting		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude	Longitude
4,500.00		22.92	4,293.44	1,148.08	485.36	14,533,349.60	2,060,246.01	40° 0' 37.304 N	109° 30' 2.610 W
4,600.00			4,391.27	1,167.13	493.41	14,533,368.77	2,060,253.74	40° 0' 37.492 N	109° 30' 2.507 W
4,700.00 4,800.00			4,489.77 4.588.81	1,183.01 1,195.72	500.13 505.50	14,533,384.77 14,533,397.56	2,060,260.19 2,060,265.35	40° 0' 37.649 N 40° 0' 37.775 N	109° 30' 2.420 W 109° 30' 2.351 W
4,900.00			4,688.27	1,205.24	509.52	14,533,407.15	2,060,269.21	40° 0' 37.869 N	109° 30' 2.299 W
4,960.91		22.92	4,749.00	1,209.47	511.31	14,533,411.41	2,060,270.93	40° 0' 37.911 N	109° 30' 2.277 W
WASA	ТСН								
5,000.00			4,788.03	1,211.55	512.19	14,533,413.51	2,060,271.77	40° 0' 37.931 N	109° 30' 2.265 W
5,100.00			4,887.96	1,214.66	513.51	14,533,416.63	2,060,273.03	40° 0' 37.962 N	109° 30' 2.248 W
5,146.57		0.00	4,934.53	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
5,200.00	747.47 hold 0.00	at 5146.57 I	עו ט 4,987.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
5,300.00		0.00	5,087.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
5,400.00	0.00	0.00	5,187.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
5,500.00			5,287.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
5,600.00		0.00	5,387.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
5,700.00 5,800.00		0.00 0.00	5,487.96 5,587.96	1,215.00 1,215.00	513.65 513.65	14,533,416.98 14,533,416.98	2,060,273.18 2,060,273.18	40° 0' 37.966 N 40° 0' 37.966 N	109° 30' 2.246 W 109° 30' 2.246 W
5,900.00			5,687.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30′ 2.246 W
6,000.00			5,787.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
6,100.00		0.00	5,887.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
6,200.00			5,987.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
6,300.00			6,087.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
6,400.00 6,500.00		0.00	6,187.96 6,287.96	1,215.00 1,215.00	513.65 513.65	14,533,416.98 14,533,416.98	2,060,273.18 2,060,273.18	40° 0' 37.966 N 40° 0' 37.966 N	109° 30' 2.246 W 109° 30' 2.246 W
6,600.00		0.00	6,387.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
6,700.00			6,487.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
6,800.00		0.00	6,587.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
6,900.00		0.00	6,687.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
7,000.00 7,100.00			6,787.96 6,887.96	1,215.00 1,215.00	513.65 513.65	14,533,416.98 14,533,416.98	2,060,273.18 2,060,273.18	40° 0' 37.966 N 40° 0' 37.966 N	109° 30' 2.246 W 109° 30' 2.246 W
7,100.00		0.00	6,987.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30′ 2.246 W
7,300.00		0.00	7,087.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
7,400.00		0.00	7,187.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
7,500.00			7,287.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
7,600.00			7,387.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
7,700.00 7,800.00		0.00	7,487.96 7,587.96	1,215.00 1,215.00	513.65 513.65	14,533,416.98 14,533,416.98	2,060,273.18 2,060,273.18	40° 0' 37.966 N 40° 0' 37.966 N	109° 30' 2.246 W 109° 30' 2.246 W
7,900.00			7,687.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
8,000.00		0.00	7,787.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
8,100.00			7,887.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
8,200.00			7,987.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
8,300.00 8,400.00			8,087.96	1,215.00 1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
8,500.00		0.00	8,187.96 8,287.96	1,215.00	513.65 513.65	14,533,416.98 14,533,416.98	2,060,273.18 2,060,273.18	40° 0' 37.966 N 40° 0' 37.966 N	109° 30' 2.246 W 109° 30' 2.246 W
8,587.04			8,375.00	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
MESA									
8,600.00	0.00	0.00	8,387.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
8,700.00			8,487.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W
8,800.00 8,900.00			8,587.96 8,687.96	1,215.00	513.65 513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W 109° 30' 2.246 W
9,000.00		0.00	8,787.96	1,215.00 1,215.00	513.65 513.65	14,533,416.98 14,533,416.98	2,060,273.18 2,060,273.18	40° 0' 37.966 N 40° 0' 37.966 N	109° 30′ 2.246 W
9,100.00			8,887.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30′ 2.246 W
9,200.00			8,987.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W





Database: Company:

EDM 2003.16 Single User Db

Kerr McGee Oil and Gas Onshore LP

Project: Uintah County, UT UTM12
Site: NBU 921-25F Pad
Well: NBU 921-25F1BS

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

True

leasured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
9,300.00	0.00	0.00	9,087.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 '
9,400.00	0.00	0.00	9,187.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 '
9,500.00	0.00	0.00	9,287.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246
9,600.00	0.00	0.00	9,387.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246
9,700.00	0.00	0.00	9,487.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246
9,800.00	0.00	0.00	9,587.96	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246
9.894.04	0.00	0.00	9,682.00	1.215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 921-25F1BS PB - plan hits target of - Circle (radius 25	center	0.00	9,682.00	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W

Casing Points					
N	Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
	2,502.72	2,410.00 8	5/8"	8.625	11.000

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	8,587.04 4,960.91 1,511.97	4,749.00	MESAVERDE WASATCH GREEN RIVER				

Plan Annotations					
Meas	ured	Vertical	Local Coor	dinates	
Dep (fi		Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
1,3	00.00	300.00 1,279.82	0.00 159.13	0.00 67.27	Start Build 2.00 Start 2846.57 hold at 1300.00 MD
5,1	46.57 46.57 94.04	3,954.71 4,934.53 9,682.00	1,055.87 1,215.00 1,215.00	446.38 513.65 513.65	Start Drop -2.00 Start 4747.47 hold at 5146.57 MD TD at 9894.04





Database: Company: EDM 2003.16 Single User Db

Kerr McGee Oil and Gas Onshore LP Uintah County, UT UTM12

Project: Site: NBU 921-25F Pad Well: NBU 921-25F1BS

Wellbore: OH Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well NBU 921-25F1BS

NBU 921-25F1BS @ 4945.00ft (ASSUMED) NBU 921-25F1BS @ 4945.00ft (ASSUMED)

True

nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,200.00 9,300.00		0.00 0.00	8,987.96 9,087.96	1,215.00 1,215.00	513.65 513.65	1,319.12 1,319.12	0.00 0.00	0.00 0.00	0.00 0.00
9,400.00 9,500.00 9,600.00	0.00 0.00	0.00 0.00 0.00	9,187.96 9,287.96 9,387.96	1,215.00 1,215.00 1,215.00	513.65 513.65 513.65	1,319.12 1,319.12 1,319.12	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
9,700.00 9,800.00	0.00	0.00	9,487.96 9,587.96	1,215.00 1,215.00	513.65 513.65	1,319.12 1,319.12	0.00	0.00	0.00
9,894.04 TD at 989	0.00 4.04 - NBU 921	0.00 -25F1BS PBH	9,682.00 L	1,215.00	513.65	1,319.12	0.00	0.00	0.00

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 921-25F1BS Pl		0.00	9,682.00	1,215.00	513.65	14,533,416.98	2,060,273.18	40° 0' 37.966 N	109° 30' 2.246 W

 Circle 	(radius 25.00)

Casing Points						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
	2,502.72	2,410.00 8 5/8	11	8.625	11.000	

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	8,587.04	8,375.00	MESAVERDE				
	4,960.91	4,749.00	WASATCH				
	1,511.97	1,479.00	GREEN RIVER				

Plan Annotat	ions				
	Measured Vertical Local Coordinates		dinates		
	Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
			• •		
	300.00	300.00	0.00	0.00	Start Build 2.00
	1,300.00	1,279.82	159.13	67.27	Start 2846.57 hold at 1300.00 MD
	4,146.57	3,954.71	1,055.87	446.38	Start Drop -2.00
	5,146.57	4,934.53	1,215.00	513.65	Start 4747.47 hold at 5146.57 MD
	9,894.04	9,682.00	1,215.00	513.65	TD at 9894.04

NBU 921-25F1BS

Surface: 2,580' FNL 1,780' FWL (SE/4NW/4) BHL: 1,366' FNL 2,296' FWL (SE/4NW/4)

NBU 921-25F1CS

Surface: 2,571' FNL 1,784' FWL (SE/4NW/4) BHL: 1,754' FNL 2,259' FWL (SE/4NW/4)

NBU 921-25F3AS

Surface: 2,589' FNL 1,776' FWL (SE/4NW/4) BHL: 2,034' FNL 1,905' FWL (SE/4NW/4)

NBU 921-25F3CS

Surface: 2,598' FNL 1,772' FWL (SE/4NW/4) BHL: 2,461' FNL 1,628' FWL (SE/4NW/4)

NBU 921-25L1BS

Surface: 2,607' FNL 1,768' FWL (SE/4NW/4) BHL: 2,597' FSL 969' FWL (NW/4SW/4)

> Pad: NBU 921-25F Section 25 T9S R21E Mineral Lease: UO 1194 ST

Uintah County, Utah Operator: Kerr-McGee Oil & Gas Onshore LP

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including, but not limited to, APDs/SULAs/ROEs/ROWs and/or easements).

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

A. Existing Roads:

Existing roads consist of county roads and improved/unimproved lease roads. APC/KMG will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

NBU 921-25F1BS / 25F1CS/ 25F3AS/ 25F3CS/ 25L1BS

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

Approximately ± 245 ' (0.1 miles) of new access road to this pad location is proposed (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

Where roads are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

Turnouts; major cut and fills; culverts; bridges; gates; cattle guards; low water crossings; or modifications needed to existing infrastructure/facilities were determined at the on-site and, as applicable, are typically shown on attached Exhibits and Topo maps.

C. <u>Location of Existing and Proposed Facilities</u>:

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of each well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) aboveground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with SITLA.

Production tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks are not to be used for disposal of liquids from additional sources without prior approval of UDOGM. Gathering facilities:

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is ± 620 ' and the individual segments are broken up as follows:

±270' (0.1 miles) –New 6" buried gas pipeline from the meter to the edge of the pad. ±350' (0.1 miles) –New 6" buried gas pipeline from the edge of pad to the existing 12" pipeline.

NBU 921-25F1BS / 25F1CS/ 25F3AS/ 25F3CS/ 25L1BS

The total liquid gathering pipeline distance from the meter to the tie in point is ± 660 ' and the individual segments are broken up as follows:

 ± 270 ' (0.1 miles) –New 4" buried liquid pipeline from the meter to the edge of the pad. ± 390 ' (0.1 miles) –New 4" buried liquid pipeline from the edge of pad to the NBU 921-25J2 pad intersection.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

The proposed pipelines will be buried and will include gas gathering and liquid gathering pipelines in the same trench. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. Kerr-McGee requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, Kerr-McGee requests a temporary 45' construction right-of-way and 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

D. <u>Location and Type of Water Supply:</u>

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. Methods of Handling Waste Materials:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E

Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E

Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Ouray #1 SWD in Sec. 1 T9S R21E NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E

NBU 921-33F SWD in Sec. 33 T9S R21E NBU 921-34L SWD in Sec. 34 T9S R21E

Drill cuttings and/or fluids will be contained in the reserve/frac pit. Cuttings will be buried in pit(s) upon closure. Unless otherwise approved, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with a synthetic material 20-mil or thicker, The liner

NBU 921-25F1BS / 25F1CS/ 25F3AS/ 25F3CS/ 25L1BS

will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. Any additional pits necessary to subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, accidental release, or in excess of reportable quantities will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule, and, where State wells are participatory to a Federal agreement, according to NTL-3A.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

NBU 921-25F1BS / 25F1CS/ 25F3AS/ 25F3CS/ 25L1BS

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. Ancillary Facilities:

None are anticipated.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1983 (NAD83) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but are not limited to: re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by APC/KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-

vegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

K. Other Information:

A Class I literature survey has been conducted by Montgomery Archaeological Consultants, Inc. (MOAC). For additional details please refer to report MOAC 10-125.

A paleontological reconnaissance has been completed by Intermountain Paleo-Consulting (IPC) and a report will be provided under separate cover.

A biological field survey was completed by Grasslands Consulting, Inc. on July 13, 2010. For additional details please refer to report GCI-297.

M. Lessee's or Operators' Representative & Certification:

Danielle Piernot Regulatory Analyst I Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6156

Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Danielle Piernot

August 13, 2010

Date

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S 36 PROPOSED WELL LOCATIONS IN T9S, R21E, SECTION 25 (MOAC Report No. 10-125) UINTAH COUNTY, UTAH

By:

Nicole Shelnut

Prepared For:

State of Utah
School and Institutional Trust Lands Administration

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP 1368 South 1200 East Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc. P.O. Box 219 Moab, Utah 84532

MOAC Report No. 10-125

July 26, 2010

State of Utah Public Lands Policy Coordination Office Permit No. 117

United States Department of Interior (FLPMA)
Permit No. 10-UT-60122



Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237 (303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Report Number: GCI #297

Report Date: August 03, 2010

Operator: Kerr-McGee Oil & Gas Onshore LP

Well: NBU 921-25F well pad (Bores: NBU 921-25F1BS, NBU 921-25F1CS, NBU 921-

25F3AS, NBU 921-25F3CS, & NBU 921-25L1BS)

Pipeline: Associated pipeline leading to proposed well pad

Access Road: Associated road leading to proposed well pad

Location: Section 25, Township 9 South, Range 21 East; Uintah County, Utah

Survey-Species: Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus*)

Survey Date: July 13, 2010

Observers: Grasslands Consulting, Inc. Biologists: Brad Snopek, Jennie Sinclair, Jonathan

Sexauer, Adrienne Cunningham, Garrett Peterson and field technicians.





Kerr-McGee Oil & Gas Onshore LP PO Box 173779 DENVER, CO 80217-3779

July 15, 2010

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11

NBU 921-25F1BS

T9S-R21E

Section 25: SENW surface and bottom hole

Surface: 2580' FNL, 1780' FWL Bottom Hole: 1366' FNL, 2296' FWL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling.

- Kerr-McGee's NBU 921-25F1BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance.
 Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

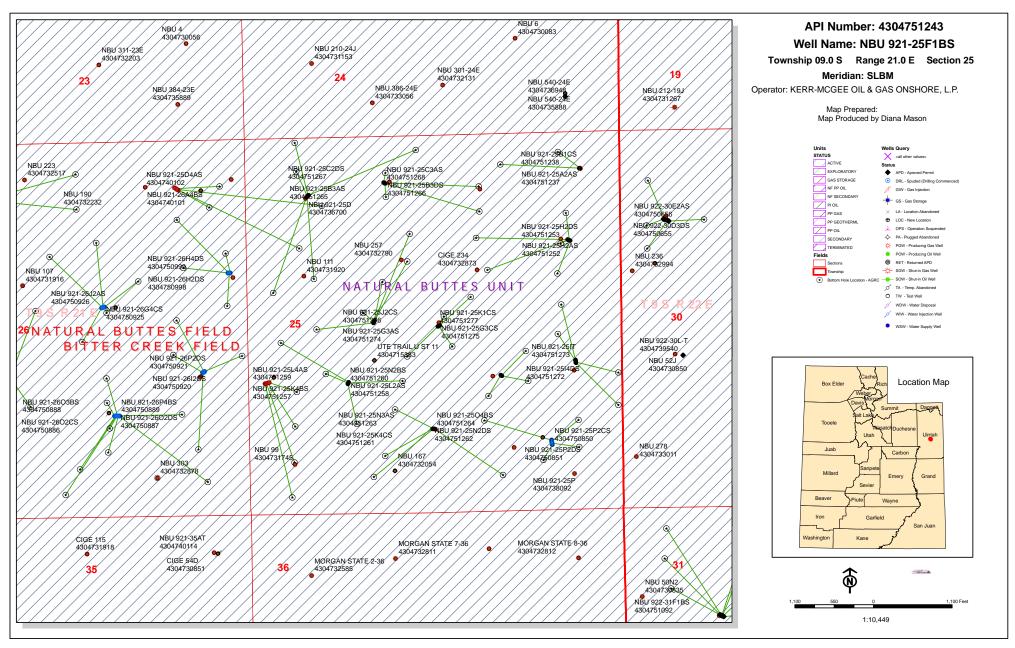
Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

her Mary

Joe Matney

Sr. Staff Landman



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

August 17, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2010 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25A Pad

43-047-51237 NBU 921-25A2AS Sec 25 T09S R21E 0489 FNL 0565 FEL BHL Sec 25 T09S R21E 0252 FNL 0865 FEL

43-047-51238 NBU 921-25B1CS Sec 25 T09S R21E 0489 FNL 0575 FEL BHL Sec 25 T09S R21E 0416 FNL 1676 FEL

NBU 921-25D Pad

43-047-51239 NBU 921-25C1AS Sec 25 T09S R21E 0800 FNL 0893 FWL

BHL Sec 25 T09S R21E 0190 FNL 2405 FWL

43-047-51240 NBU 921-25D1BS Sec 25 T09S R21E 0807 FNL 0885 FWL

BHL Sec 25 T09S R21E 0060 FNL 0716 FWL

43-047-51241 NBU 921-25E1CS Sec 25 T09S R21E 0821 FNL 0871 FWL

BHL Sec 25 T09S R21E 1976 FNL 0947 FWL

43-047-51242 NBU 921-25E3AS Sec 25 T09S R21E 0828 FNL 0864 FWL

BHL Sec 25 T09S R21E 2162 FNL 0371 FWL

43-047-51251 NBU 921-25D1CS Sec 25 T09S R21E 0814 FNL 0878 FWL

BHL Sec 25 T09S R21E 0460 FNL 0726 FWL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25F Pad

43-047-51244 NBU 921-25F1BS Sec 25 T09S R21E 2580 FNL 1780 FWL 843-047-51244 NBU 921-25F1CS Sec 25 T09S R21E 2571 FNL 1784 FWL BHL Sec 25 T09S R21E 1754 FNL 2259 FWL 43-047-51245 NBU 921-25F3AS Sec 25 T09S R21E 2589 FNL 1776 FWL BHL Sec 25 T09S R21E 2034 FNL 1905 FWL 843-047-51246 NBU 921-25F3CS Sec 25 T09S R21E 2598 FNL 1772 FWL BHL Sec 25 T09S R21E 2461 FNL 1628 FWL 43-047-51247 NBU 921-25L1BS Sec 25 T09S R21E 2607 FNL 1768 FWL 43-047-51247 NBU 921-25L1BS Sec 25 T09S R21E 2607 FNL 1768 FWL

BHL Sec 25 T09S R21E 2597 FSL 0969 FWL

NBU 921-25H Pad

43-047-51248 NBU 921-25A3DS Sec 25 T09S R21E 1498 FNL 0736 FEL BHL Sec 25 T09S R21E 1110 FNL 0776 FEL 43-047-51249 NBU 921-25G1CS Sec 25 T09S R21E 1489 FNL 0754 FEL BHL Sec 25 T09S R21E 1489 FNL 1893 FEL 43-047-51250 NBU 921-25G2AS Sec 25 T09S R21E 1484 FNL 0763 FEL BHL Sec 25 T09S R21E 1439 FNL 2042 FEL BHL Sec 25 T09S R21E 1439 FNL 2042 FEL BHL Sec 25 T09S R21E 1439 FNL 0745 FEL BHL Sec 25 T09S R21E 1538 FNL 0857 FEL BHL Sec 25 T09S R21E 1538 FNL 0857 FEL BHL Sec 25 T09S R21E 1538 FNL 0857 FEL BHL Sec 25 T09S R21E 1502 FNL 0727 FEL BHL Sec 25 T09S R21E 1958 FNL 0913 FEL

NBU 921-25J Pad

43-047-51254 NBU 921-25J4AS Sec 25 T09S R21E 1878 FSL 1725 FEL BHL Sec 25 T09S R21E 1795 FSL 1360 FEL 43-047-51255 NBU 921-25J4CS Sec 25 T09S R21E 1886 FSL 1743 FEL BHL Sec 25 T09S R21E 1604 FSL 1920 FEL 43-047-51256 NBU 921-25J1DS Sec 25 T09S R21E 1882 FSL 1734 FEL BHL Sec 25 T09S R21E 2218 FSL 1381 FEL

NBU 921-25K Pad

43-047-51257 NBU 921-25K4BS Sec 25 T09S R21E 1838 FSL 1400 FWL BHL Sec 25 T09S R21E 1848 FSL 2161 FWL 43-047-51258 NBU 921-25L2AS Sec 25 T09S R21E 1848 FSL 1402 FWL BHL Sec 25 T09S R21E 2423 FSL 0465 FWL

API #	WE:	LL NAME			LOCA'	TION		
(Proposed PZ	WASA	ATCH-MESA VI	ERDE))				
43-047-51259	NBU				R21E R21E			
43-047-51260	NBU				R21E R21E			
NBU 921-25N 1	Pad							
43-047-51261	NBU				R21E R21E			
43-047-51262	NBU				R21E R21E			
43-047-51263	NBU				R21E R21E			
43-047-51264	NBU				 R21E R21E		_	
NBU 921-25C	Pad							
43-047-51265	NBU				R21E R21E			
43-047-51266	NBU				R21E R21E			
43-047-51267	NBU				R21E R21E			
43-047-51268	NBU				R21E R21E			
NBU 921-25I I	Pad							
43-047-51269	NBU				R21E R21E			
43-047-51270	NBU				R21E R21E			
43-047-51271	NBU				 R21E R21E		_	
43-047-51272	NBU				R21E R21E			
43-047-51273	NBU				R21E R21E			

Page 4

API # WELL NAME

LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25J2 Pad

43-047-51274 NBU 921-25G3AS Sec 25 T09S R21E 2611 FSL 2578 FEL BHL Sec 25 T09S R21E 2265 FNL 2136 FEL 43-047-51275 NBU 921-25G3CS Sec 25 T09S R21E 2606 FSL 2587 FEL BHL Sec 25 T09S R21E 2530 FNL 2518 FEL BHL Sec 25 T09S R21E 2530 FNL 2518 FEL BHL Sec 25 T09S R21E 2601 FSL 2596 FEL BHL Sec 25 T09S R21E 2310 FSL 2410 FEL BHL Sec 25 T09S R21E 2596 FSL 2410 FEL BHL Sec 25 T09S R21E 2596 FSL 2605 FEL BHL Sec 25 T09S R21E 2596 FSL 2631 FWL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn-Michael L. Coulthard, o-Bureau of Land Management, ou-Branch of Minerals,
small-Michael Coulthardgelorm, pou, c-US
pare-2010 Rg 17 J 145946, nG007

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:8-17-10

From: Jim Davis

To: Bonner, Ed; Garrison, LaVonne; Hill, Brad; Mason, Diana

CC: Bartlett, Floyd; Laura.Gianakos@anadarko.com; Piernot, Danielle; Upch...

Date: 9/2/2010 9:13 AM

Subject: SITLA approval of Kerr McGee wells **Attachments:** KMG approvals and paleo 9.1.2010.xlsx

The following wells have been approved by SITLA including arch clearance. Paleo clearance is also granted with stipulations as noted.

Full Paleo monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist.

```
NBU 922-29F4DS [API #4304751207] Full Monitoring IPC 10-08
 NBU 922-29G4CS [API #4304751208] Full Monitoring
                                                  IPC 10-08
 NBU 922-29J4BS [API #4304751209] Full Monitoring
                                                  IPC 10-08
 NBU 922-29K1DS [API #4304751210] Full Monitoring
                                                   IPC 10-08
 NBU 922-29G1AS [API #4304751194] Full Monitoring
                                                  IPC 10-06
 NBU 922-29G1DS [API #4304751195] Full Monitoring
                                                   IPC 10-06
 NBU 922-29G2BS [API #4304751196] Full Monitoring
                                                  IPC 10-06
 NBU 922-29G3BS [API #4304751197] Full Monitoring
                                                  IPC 10-06
NBU 921-25A3DS [API 4304751248]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25G1CS [API 4304751249]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25G2AS [API 4304751250]
                                                  IPC 10-21
                                    Full Monitoring
NBU 921-25H2AS [API 4304751252]
                                    Full Monitoring
                                                  IPC 10-21
NBU 921-25H2DS [API 4304751253]
                                    Full Monitoring
                                                  IPC 10-21
NBU 921-25G3AS [API 4304751274]
                                    Full Monitoring
                                                  IPC 10-23
NBU 921-25G3CS [API 4304751275]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25J2CS [API 4304751276]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25K1CS [API 4304751277]
                                                  IPC 10-23
                                    Full Monitoring
NBU 921-25A2AS [API 4304751237]
                                    Full Monitoring IPC 10-21
NBU 921-25B1CS [API 4304751238]
                                    Full Monitoring IPC 10-21
```

Spot Paleo Monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist at the beginning of construction and thereafter spot-monitored as paleontological conditions merit.

```
Spot Monitoring IPC 10-20
NBU 921-25C1AS [API 4304751239]
NBU 921-25D1BS [API 4304751240]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25D1CS [API 4304751251]
NBU 921-25E1CS [API 4304751241]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25E3AS [API 4304751242]
NBU 921-25F1BS [API 4304751243]
                                    Spot Monitoring IPC 10-21
NBU 921-25F1CS [API 4304751244]
                                    Spot Monitoring IPC 10-21
NBU 921-25F3AS [API 4304751245]
                                    Spot Monitoring IPC 10-21
NBU 921-25F3CS [API 4304751246]
                                    Spot Monitoring IPC 10-21
NBU 921-25L1BS [API 4304751247]
                                    Spot Monitoring IPC 10-21
NBU 921-25J1DS [API 4304751256]
                                    Spot Monitoring IPC 10-23
NBU 921-25J4AS [API 4304751254]
                                    Spot Monitoring IPC 10-23
NBU 921-25J4CS [API 4304751255]
                                    Spot Monitoring IPC 10-23
NBU 921-25K4BS [API 4304751257]
                                    Spot Monitoring IPC 10-22
NBU 921-25L2AS [API 4304751258]
                                    Spot Monitoring IPC 10-22
NBU 921-25L4AS [API 4304751259]
                                    Spot Monitoring IPC 10-22
                                    Spot Monitoring IPC 10-22
NBU 921-25N2BS [API 4304751260]
NBU 921-25K4CS [API 4304751261]
                                    Spot Monitoring IPC 10-23
NBU 921-25N2DS [API 4304751262]
                                    Spot Monitoring IPC 10-23
NBU 921-25N3AS [API 4304751263]
                                    Spot Monitoring IPC 10-23
```

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NBU 921-25O4BS [API 4304751264]
                                    Spot Monitoring IPC 10-23
                                    Spot Monitoring IPC 10-20
NBU 921-25B3AS [API 4304751265]
NBU 921-25B3DS [API 4304751266]
                                    Spot Monitoring IPC 10-20
NBU 921-25C2DS [API 4304751267]
                                    Spot Monitoring IPC 10-20
                                    Spot Monitoring IPC 10-20
NBU 921-25C3AS [API 4304751268]
NBU 921-25IT [API 4304751273]
                                    Spot Monitoring IPC 10-23
NBU 921-25H3DS [API 4304751269]
                                    Spot Monitoring IPC 10-23
NBU 921-25I2AS [API 4304751270]
                                    Spot Monitoring IPC 10-23
NBU 921-25I4AS [API 4304751271]
                                    Spot Monitoring IPC 10-23
NBU 921-25I4DS [API 4304751272]
                                    Spot Monitoring IPC 10-23
NBU 922-29A1BS [API #4304751183]
                                    Spot Monitoring IPC 10-06
 NBU 922-29A1CS [API #4304751184] Spot Monitoring IPC 10-06
 NBU 922-29A4CS [API #4304751185] Spot Monitoring IPC 10-06
 NBU 922-29H1BS [API #4304751186] Spot Monitoring IPC 10-06
 NBU 922-29B2CS [API #4304751187] Spot Monitoring IPC 10-06
 NBU 922-29B4AS [API #4304751188] Spot Monitoring IPC 10-06
                                                             (SITLA surf/ Fed Min)
 NBU 922-29C2AS [API #4304751189] Spot Monitoring IPC 10-06
                                                             (SITLA surf/ Fed Min)
 NBU 922-29C4AS [API #4304751190] Spot Monitoring IPC 10-06
 NBU 922-29B1AS [API #4304751191] Spot Monitoring IPC 10-06
 NBU 922-29B1DS [API #4304751192] Spot Monitoring IPC 10-06
 NBU 922-29B2BS [API #4304751193] Spot Monitoring IPC 10-06
 NBU 922-29D4DS [API #4304751198] Spot Monitoring IPC 10-05
 NBU 922-29E3BS [API #4304751199] Spot Monitoring IPC 10-05
 NBU 922-29F3AS [API #4304751200] Spot Monitoring IPC 10-05
 NBU 922-29F3BS [API #4304751201] Spot Monitoring IPC 10-05
 NBU 922-29G4AS [API #4304751202] Spot Monitoring IPC 10-06
 NBU 922-29H1CS [API #4304751203] Spot Monitoring IPC 10-06
 NBU 922-29H4CS [API #4304751204] Spot Monitoring IPC 10-06
 NBU 922-2911BS [API #4304751205] Spot Monitoring IPC 10-06
 NBU 922-29I1CS [API #4304751206] Spot Monitoring IPC 10-06
 NBU 922-29K2CS [API #4304751211] Spot Monitoring IPC 10-07
 NBU 922-29K4AS [API #4304751212] Spot Monitoring IPC 10-07
 NBU 922-29L1AS [API #4304751213] Spot Monitoring IPC 10-07
 NBU 922-29L2BS [API #4304751214] Spot Monitoring IPC 10-07
 NBU 922-29L2CS [API #4304751215] Spot Monitoring IPC 10-07
 NBU 922-29L3CS [API #4304751216] Spot Monitoring IPC 10-07
 NBU 922-29M2AS [API #4304751217] Spot Monitoring IPC 10-07
 NBU 922-29N2BS [API #4304751218] Spot Monitoring IPC 10-07
 NBU 922-29N3BS [API #4304751219] Spot Monitoring IPC 10-07
 NBU 922-30I4BS [API #4304751220] Spot Monitoring IPC 10-07 (SITLA surf/ Fed Min)
 NBU 922-30I4CS [API #4304751221] Spot Monitoring IPC 10-07 (SITLA surf/Fed Min)
 NBU 922-29J4CS [API #4304751222] Spot Monitoring IPC 10-08
 NBU 922-29N1BS [API #4304751223] Spot Monitoring IPC 10-08
 NBU 922-29O1CS [API #4304751224] Spot Monitoring IPC 10-08
```

That's quite a list, so I'm attaching a quick-and-dirty spreadsheet of the same data. This may be helpful to some of you.

Thanks.

-Jim

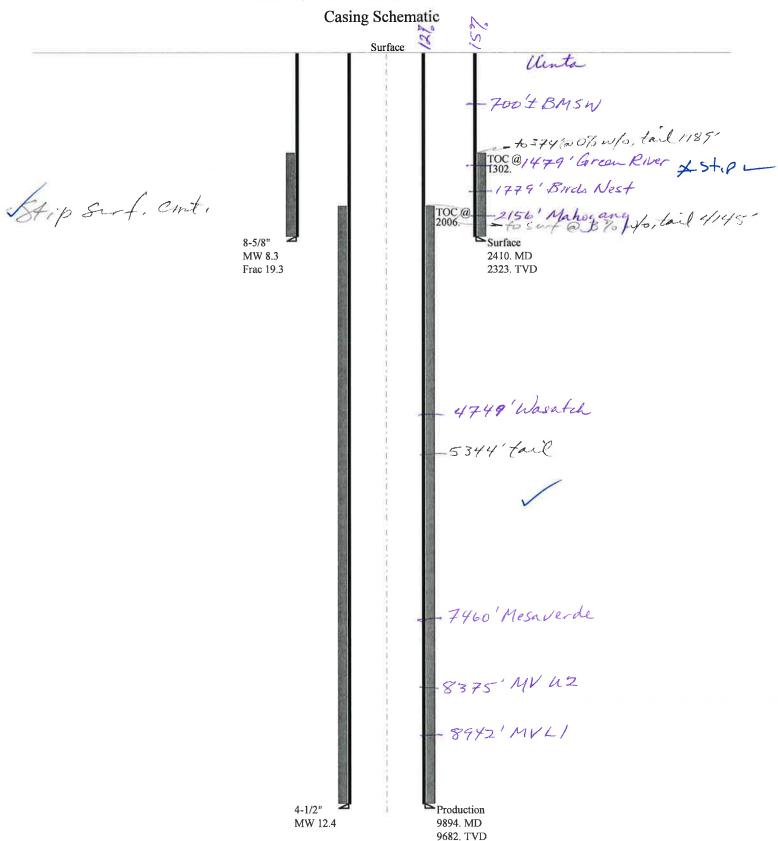
'APIWellNo:43047512430000'

Jim Davis Utah Trust Lands Administration jimdavis1@utah.gov Phone: (801) 538-5156

BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-25F1BS 43047512430000

Well Name		KERR-MCGEE O	OIL	L & GAS ONSHOR	RE	, L.P. NBU 921-2	25F1	F1BS 4304751243
String		Surf	Ti	Prod	Ī		Ī	
Casing Size(")		8.625	Ti	4.500	Ī		Ī	
Setting Depth (TVD)		2410	Ti	9682	li		Ī	
Previous Shoe Setting Dept	th (TVD)	40	Ť	2410	li		Ī	
Max Mud Weight (ppg)		8.3	Ť	12.4	li		Ť	
BOPE Proposed (psi)		500	Ť	5000	ľ		Ť	
Casing Internal Yield (psi)		3390	Ť	7780	ľ		Ť	
Operators Max Anticipate	d Pressure (psi)	6100	Ť	12.1	ľ		Ť	
				,	_		12-	·
Calculations	Sui	rf String			_	8.6	525	25 "
Max BHP (psi)		.052*Sett	tin	ng Depth*M\	W	/= 1044		DODE 1 D.
MAGD (C.) ()		DIID (0.12)		0 wi - D - d	_	-	_	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		ax BHP-(0.12	_		_	,	=	NO air drill
MASP (Gas/Mud) (psi)	Ma	ax BHP-(0.22	2*5	Setting Depti	h))= 514		NO OK
Duogauma At Duovious Chao	May DIID 22*(Catting D	Santh Dravia		a Chao Dontl	ا ا ما	<u> </u>	_	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe		Jepin - Previo	ou	is Snoe Depu	n)		=	NO Reasonable depth in area
Required Casing/BOPE To			_		_	2373	_	psi to the state of the state o
*Max Pressure Allowed @	Previous Casing Shoe=				_	40		psi *Assumes 1psi/ft frac gradient
Calculations	Pro	od String			_	4.5	500	00 "
Max BHP (psi)		.052*Sett	tin	ng Depth*M\	W	/= 6243		
								BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Ma	ax BHP-(0.12	2*5	Setting Deptl	h))= 5081		NO
MASP (Gas/Mud) (psi)	Ma	ax BHP-(0.22	2*5	Setting Deptl	h))= 4113		YES OK
								*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Γ	Depth - Previo	ou	s Shoe Deptl	h))= 4643		NO Reasonable
Required Casing/BOPE To	est Pressure=					5000		psi
*Max Pressure Allowed @	Previous Casing Shoe=					2410		psi *Assumes 1psi/ft frac gradient
Calculations		String	_		_			"
Max BHP (psi)	, <u>, , , , , , , , , , , , , , , , , , </u>		tin	ng Depth*M\	(X)	7=	=	-
(psi)		.032 3011	tiii	ig Deptii Wi	••	<u> </u>	_	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Ma	ax BHP-(0.12)*5	Setting Deptl	h))=	<u> </u>	NO NO
MASP (Gas/Mud) (psi)		ax BHP-(0.22			_	1	=	NO I
(2000 00)			_	8 ·I·	_		_	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Γ	Depth - Previo	ou	s Shoe Deptl	h))=	_	NO I
Required Casing/BOPE To	est Pressure=							psi
*Max Pressure Allowed @	Previous Casing Shoe=							psi *Assumes 1psi/ft frac gradient
Calculations		String	_				_	"
Max BHP (psi)		.052*Sett	tin	ng Depth*M\	W	/=		
MASD (Cas) (ms!)	3.7	DLID (0.12) * C	Catting D 1	اما اما	<u> </u>	_	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)		ax BHP-(0.12			_		<u>_</u>	NO
MASP (Gas/Mud) (psi)	Ma	ax BHP-(0.22	-	Setting Depth	n)) -		*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	May RHD 22*/Ca#im = F	anth Deari-		us Shoo Dord	h)	_		
		Jepui - Mevic	ou	is snot Depu	(1)	,	4	NO
Required Casing/BOPE To			_		_	<u> </u>	_	psi
*Max Pressure Allowed @	r revious Casing Snoe=					III.		psi *Assumes 1psi/ft frac gradient

43047512430000 NBU 921-25F1BS



Well name:

43047512430000 NBU 921-25F1BS

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Surface

Project ID:

Location:

UINTAH COUNTY 43-047-51243

Design parameters:		Minimum desig	n factors:	Environment:	
Collapse		Collapse:		H2S considered?	No
Mud weight:	8.330 ppg	Design factor	1.125	Surface temperature:	74 °F
Design is based on even	acuated pipe.	•		Bottom hole temperature:	107 °F
•				Temperature gradient:	1.40 °F/100ft
				Minimum section length:	100 ft
		Burst:			

Design factor

Burst

Max anticipated surface

pressure: 2,121 psi Internal gradient: 0.120 psi/ft Calculated BHP 2,400 psi

No backup mud specified.

Tension:

1.00

8 Round STC: 1.80 (J) 8 Round LTC: 1.70 (J) 1.60 (J) Buttress: Premium: 1.50 (J) Body yield: 1.50 (B)

Tension is based on air weight. Neutral point: 2,106 ft Cement top: 1,302 ft

Directional Info - Build & Drop

Kick-off point 300 ft Departure at shoe: 552 ft Maximum dogleg: 2 °/100ft 20° Inclination at shoe:

Re subsequent strings:

Next setting depth: 9,682 ft Next mud weight: 12.400 ppg Next setting BHP: 6,237 psi Fracture mud wt: 19.250 ppg Fracture depth: 2,410 ft Injection pressure: 2,410 psi

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length (ft)	Size (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Cost (\$)
1	2410	8.625	28.00	1-55	LT&C	2323	2410	7.892	95436
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: October 6,2010 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2323 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047512430000 NBU 921-25F1BS

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Production

Project ID:

Location:

UINTAH

COUNTY

43-047-51243

Environment:

Design parameters:

Collapse

Mud weight: Internal fluid density: 12.400 ppg 2.330 ppg Minimum design factors:

Collapse:

Design factor

1.125

H2S considered? Surface temperature: Bottom hole temperature:

74 °F 210 °F 1.40 °F/100ft

No

Temperature gradient: Minimum section length:

100 ft

Burst:

Design factor

1.00

Cement top:

2,006 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

4,107 psi 0.220 psi/ft 6,237 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J) 1.80 (J) 8 Round LTC: 1.60 (J) Buttress: 1.50 (J) Premium:

Body yield: 1.60 (B)

Tension is based on air weight. Neutral point: 8,099 ft

Directional Info - Build & Drop

Kick-off point 300 ft Departure at shoe: 1319 ft Maximum dogleg: 2 °/100ft

0 ° Inclination at shoe:

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9894	4.5	11.60	I-80	LT&C	9682	9894	3.875	130601
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load (psi)	Strength (psi)	Design Factor	Load (psi)	Strength (psi)	Design Factor	Load (kips)	Strength (kips)	Design Factor
1	5065	6360	1.256	6237	7780	1.25	112.3	212	1.89 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: October 6,2010 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9682 ft, a mud weight of 12.4 ppg. An internal gradient of .121 psi/ft was used for collapse from TD Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name NBU 921-25F1BS

API Number 43047512430000 APD No 2929 Field/Unit NATURAL BUTTES

Location: 1/4,1/4 SENW **Sec** 25 **Tw** 9.0S **Rng** 21.0E 2580 FNL 1780 FWL

GPS Coord (UTM) 627823 4429421 Surface Owner

Participants

Floyd Bartlett (DOGM), Sheila Wopsock, Clay Einerson, Roger Perry, Laura Gianokas, Lovel Young, Grizz Oleen, (Kerr McGee), Mitch.Batty, John Slaugh, (Timberline Engineering and Land Surveying), Ed Bonner (SITLA), Ben Williams (UDWR).

Regional/Local Setting & Topography

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.6 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Approximately 245 feet of new construction will be needed. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25F pad will be a new location oriented in a north to southerly direction on the east slope of a ridge which runs northerly. The main road through the area is immediately to the east. At the well location the topography becomes more gentle. The reserve pit will be excavated into a moderately steep side slope. Any overland flow from the slope above the pit will be blocked with pit spoils. A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope. Excess flow will leave the southeast side and flow around the fill of the pad. On the northwest side of the location a drainage will be blocked by spoils material. After the reserve pit is closed this side and drainage will be tightened-up, blocked with spoils and diverted around the pad. Five gas wells will be directionally drilled from this pad. They are the NBU 921-25F1CS, 921-25F1BS, 921-25F3AS, 921-25F3CS and 921-25L1BS. The White River is approximately 3-1/2 miles down drainage. The selected site appears to be a good location for constructing a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

Grazing

Wildlfe Habitat

New Road Miles Well Pad Src Const Material Surface Formation

0.05 Width 342 Length 465 Onsite UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

10/7/2010 Page 1

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation is a desert shrub type, which includes shadscale, curly mesquite, broom snakeweed, herbaceous sage, globemallow, greasewood and halogeton..

Antelope, sheep during the winter, rabbits, coyotes, and small mammals, birds and raptors.

Soil Type and Characteristics

Surface soils are a shallow rocky sandy loam.

Erosion Issues Y

Any overland flow from the slope above the pit will be blocked with pit spoils

Sedimentation Issues Y

A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope.

Site Stability Issues N

Drainage Diverson Required? Y

On the northwest side of the location a drainage will be blocked by spoils material. After the reserve pit is closed this side and drainage will be tightened-up, blocked with spoils and diverted around the pad.

Berm Required? N

Erosion Sedimentation Control Required? Y

On the northwest side of the location a drainage will be blocked by spoils material. After the reserve pit is closed this side and drainage will be tightened-up, blocked with spoils and diverted around the pad.

Paleo Survey Run? Y Paleo Potental Observed? Y Cultural Survey Run? Y Cultural Resources? N

Reserve Pit

Site-Specific Factors	Site R	anking	
Distance to Groundwater (feet)	100 to 200	5	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	40	1 Sensitivity Level

Characteristics / Requirements

10/7/2010 Page 2

The proposed reserve pit is 125' x 260' x 12' deep located in a cut on the southwest side of the location. Kerr McGee plans a 30-mil liner with a double felt sub-liner.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 30 Pit Underlayment Required? Y

Other Observations / Comments

Floyd Bartlett 8/26/2010 **Evaluator Date / Time**

10/7/2010 Page 3

Application for Permit to Drill Statement of Basis

10/7/2010 Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	r CBM
2929	43047512430000	SITLA GW		S	No
Operator	KERR-MCGEE OIL & GAS	S ONSHORE, L.P.	Surface Owner-APD		
Well Name	NBU 921-25F1BS		Unit	NATURAL	BUTTES
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	SENW 25 9S 21E S	2580 FNL 1780 F	WL GPS Coord (UTM)	627828E	4429417N

Geologic Statement of Basis

Kerr McGee proposes to set 2,410' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 700'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 25. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect any usable ground water.

Brad Hill 9/29/2010 **APD Evaluator Date / Time**

Surface Statement of Basis

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.6 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Approximately 245 feet of new construction will be needed. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The NBU 921-25F pad will be a new location oriented in a north to southerly direction on the east slope of a ridge which runs northerly. The main road through the area is immediately to the east. At the well location the topography becomes more gentle. The reserve pit will be excavated into a moderately steep side slope. Any overland flow from the slope above the pit will be blocked with pit spoils. A small but active drainage angles across the location from the southwest or reserve pit side. This will be blocked with excess location spoils and diverted into a small natural pond area which could be cleaned to store water for sheep and antelope. Excess flow will leave the southeast side and flow around the fill of the pad. On the northwest side of the location a drainage will be blocked by spoils material. After the reserve pit is closed this side and drainage will be tightened-up, blocked with spoils and diverted around the pad. Five gas wells will be directionally drilled from this pad. They are the NBU 921-25F1CS, 921-25F1BS, 921-25F3AS, 921-25F3CS and 921-25L1BS. The White River is approximately 3-1/2 miles down drainage. The selected site appears to be a good location for constructing a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA. Ed Bonner represented SITLA at the pre-site investigation. Mr. Bonner had no concerns pertaining to this location. SITLA will provide site reclamation standards and a seed mix.

Ben Williams represented the Utah Division of Wildlife Resources. Mr. Williams stated the area is classified as crucial yearlong antelope habitat but recommended no restrictions for this species. No other wildlife will be significantly affected.

10/7/2010

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 2

Floyd Bartlett
Onsite Evaluator

8/26/2010 **Date / Time**

Conditions of Approval / Application for Permit to Drill

Category Condition

Pits A synthetic liner with a minimum thickness of 30 mils with a double felt subliner shall be properly installed and

maintained in the reserve pit.

Surface Drainages adjacent to the proposed pad shall be diverted around the location. Surface The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/13/2010 **API NO. ASSIGNED:** 43047512430000

WELL NAME: NBU 921-25F1BS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SENW 25 090S 210E **Permit Tech Review:**

> SURFACE: 2580 FNL 1780 FWL **Engineering Review:**

> **BOTTOM:** 1366 FNL 2296 FWL Geology Review:

COUNTY: UINTAH

LATITUDE: 40.00717 **LONGITUDE:** -109.50239 **UTM SURF EASTINGS: 627828.00** NORTHINGS: 4429417.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE LEASE NUMBER: UO 1194 ST

SURFACE OWNER: 3 - State COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

LOCATION AND SITING:

✓ PLAT R649-2-3.

Unit: NATURAL BUTTES Bond: STATE/FEE - 22013542

Potash R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 Drilling Unit

Board Cause No: Cause 173-14 Water Permit: Permit #43-8496

Effective Date: 12/2/1999 **RDCC Review:**

Siting: Suspends General Siting **Fee Surface Agreement**

R649-3-11. Directional Drill ✓ Intent to Commingle

Commingling Approved

Comments: Presite Completed

Stipulations:

3 - Commingling - ddoucet 5 - Statement of Basis - bhill

15 - Directional - dmason 17 - Oil Shale 190-5(b) - dmason 25 - Surface Casing - hmacdonald

API Well No: 43047512430000



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 921-25F1BS API Well Number: 43047512430000 Lease Number: UO 1194 ST

Surface Owner: STATE **Approval Date:** 10/7/2010

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

API Well No: 43047512430000

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas

Print Form

BLM - Vernal Field Office - Notification Form

Ope	rator KERR-McGEE OIL & GA	AS Rig Name/# BUC	KET RIG
Sub	mitted By ANDY LYTLE	Phone Number 720	.929.6100
	Name/Number NBU 921-25F		
	Qtr SENW Section 25		Range 21E
Leas	se Serial Number <u>UO 1194 ST</u>		
API	Number <u>4304751243</u>	·	
	<u>d Notice</u> – Spud is the initial below a casing string.	spudding of the we	ell, not drillin
	Date/Time <u>10/26/2010</u>	09:00 HRS AM	PM 🗌
time	ng – Please report time casi es. Surface Casing Intermediate Casing Production Casing Liner Other	ing run starts, not c	ementing
	Date/Time <u>12/26/2010</u>	08:00 HRS AM	РМ
BOP	E		
	Initial BOPE test at surface	casing point	
	BOPE test at intermediate	casing point	
	30 day BOPE test	- ,	
	Other		
	Date/Time	AM [PM 🗌
Rem	arks estimated date and time. Plea	SE CONTACT KENNY GATHINGS	AT
435.78	1.7048 OR LOVEL YOUNG AT 435.828.098	6	

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURD DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST
SUND	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	sals to drill new wells, significantly deepe ugged wells, or to drill horizontal laterals.	n existing wells below current Use APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-25F1BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047512430000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PH Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 9 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENW Section: 25	IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian	: S	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
SUBSEQUENT REPORT	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT	☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
✓ SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud: 10/25/2010	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:
MIRU PETE MARTIN RAN 14" 36.7# SCHI SPUD WELL I	DMPLETED OPERATIONS. Clearly show all post in BUCKET RIG. DRILLED 20" (BUCKET RIG. DRILLED 20" (BUCKET RIG. DRILLED 20" (BUCKET RIG. DRILLED 20" (BUCKET) (B	CONDUCTOR HOLE TO 40'. CMT W/ 28 SX READY MIX 2010 AT 17:00 HRS. Oi FOF	•
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	R TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 11/1/2010	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM								
Operator:	KERR McGEE OIL & GAS ONSHORE LP	Operator Account Number: N 2995						
Address:	P.O. Box 173779	Operator Account Number: N ====						
	city DENVER							
,	state CO zip 80217	— Phone Number: (720) 929-6100						

Well 1

API Number	Well	Name	QQ	Sec	Twp	Rng	Rng County 21E UINTAH Entity Assignment Effective Date 11/4/10	
4304751243	NBU 921-25	F1BS	SENW	25	98			
Action Code	Current Entity Number	New Entity Number	s	pud Da	te	Entit Ef		
B	99999	2900	10	0/25/20	10	11		
Comments: MIRU SPUD	PETE MARTIN BUCKI WELL LOCATION ON	ET RIG. WSM	VA 0 HRS.	$\mathcal{B}_{\mathcal{U}}$	4.5.5	FN(x)		

Well 2

County	Rng	Twp	Sec	QQ	Name	Well I	API Number
21E UINTAH		98	25	SENW	-1CS	NBU 921-25F	4304751244
Entity Assignment Effective Date II/4/ID		te	pud Dat	S	New Entity Number	Current Entity Number	Action Code
		10	0/25/201	10	2900	99999	\mathcal{B}
				16	ETRIG. WSMI	99999 PETE MARTIN BUCKE WELL LOCATION ON	Comments: MIRU

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity New Entity Number Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							V

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entitle EIVED
- E Other (Explain in 'comments' section)

NOV 0 1 2010

ANDY LYTLE	
Name (Please Print)	
Signature	

REGULATORY ANALYST 11/1/2010 Title Date

	STATE OF UTAH		FORM 9		
	5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST				
SUND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
	sals to drill new wells, significantly deepen ex ugged wells, or to drill horizontal laterals. Use		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 921-25F1BS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS		9. API NUMBER: 43047512430000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE treet, Suite 600, Denver, CO, 80217 3779	NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S			STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION				
	☐ ACIDIZE ☐	ALTER CASING	☐ CASING REPAIR		
Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
11/1/2010	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE		
SUBSEQUENT REPORT	☐ DEEPEN ☐	FRACTURE TREAT	☐ NEW CONSTRUCTION		
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK		
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	☐ TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION		
,	☐ WILDCAT WELL DETERMINATION ✓	OTHER	OTHER: ACTS/ Pit refurb		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore, LP is requesting to refurb the existing pit on this multi-well pad for completion operations. The refurb pit will be relined per the requirements in the COA of the APD. Upon completion of the wells on this pad, Kerr-McGee is also requesting to utilize this pit as an ACTS staging pit to be utilized for other completion operations in the area. There will be 2-500 bbl temporary frac tanks placed on the location. The trucks will unload water into these tanks before the water is placed into the refurbed pit. The purpose of the frac tanks is to collect any hydro-carbons that may have been associatedly: with the other completion operations before releasing into the pit. We plan to keep this pit open for 1 year. During this time the surrounding well location completion fluids will be recycled in this pit and utilized for other frac jobs in the surrounding sections.					
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst			
SIGNATURE N/A	, 20 323 0130	DATE 10/25/2010			



The Utah Division of Oil, Gas, and Mining

- State of UtahDepartment of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047512430000

A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the pit.

> Approved by the **Utah Division of** Oil, Gas and Mining

STATE OF UTAH		FORM 9				
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING			5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST			
SUNDF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:					
	sals to drill new wells, significantly deepen ıgged wells, or to drill horizontal laterals. U		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-25F1BS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.			9. API NUMBER: 43047512430000			
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4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 25 Township: 09.0S Range: 21.0E Meridian: S			STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION					
	ACIDIZE	ALTER CASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME			
	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	□ NEW CONSTRUCTION			
	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK			
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
✓ DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL			
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
11/7/2010	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PROPETRO AIR RIG ON NOVEMBER 5, 2010. DRILLED 11" SURFACE HOLE TO 2730'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 50 BBLS FRES Accepted by the WATER. PUMP 20 BBLS GEL WATER. LEAD CEMENT W/ 200 SX CLASS G PRE Vitah Division of @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 170 SX CLASS G PREM LITE @ 518 Gas and Mining PPG, 1.15 YD. DROP PLUG ON THE FLY, DISPLACED W/ 161 BBLS WATER RECORD ONLY PARTIAL RETURNS. SLOWED DOWN RATE, LIFT PRESSURE WAS 550 PS. BUMP PLUG & HOLD 850 PSI FOR 5 MIN. FLOAT HELD. TRACE OF CEMENT TO SURFACE; FELL BACK. TOP OUT #1 W/ 125 SX SAME CEMENT. CEMENT TO SURFACE. WORT.						
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst				
SIGNATURE N/A		DATE 11/8/2010				

	STATE OF UTAH		FORM 9					
	5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST							
SUND	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:						
	sals to drill new wells, significantly deepen exi ugged wells, or to drill horizontal laterals. Use		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES					
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-25F1BS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047512430000					
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4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL			COUNTY: UINTAH					
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: 5 Township: 09.0S Range: 21.0E Meridian: S		STATE: UTAH					
11. CHE	CK APPROPRIATE BOXES TO INDICATE I	NATURE OF NOTICE, REPORT,	OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
	☐ ACIDIZE ☐	ALTER CASING	☐ CASING REPAIR					
Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME					
11/1/2010	☐ CHANGE WELL STATUS ☐	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN ☐	FRACTURE TREAT	☐ NEW CONSTRUCTION					
Date of Work Completion:	☐ OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK					
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION					
Date of Spud:	☐ REPERFORATE CURRENT FORMATION ☐	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON					
	☐ TUBING REPAIR ☐	VENT OR FLARE	WATER DISPOSAL					
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION					
1	☐ WILDCAT WELL DETERMINATION ✓	OTHER	OTHER: ACTS/ Pit refurb					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore, LP is requesting to refurb the existing pit on this multi-well pad for completion operations. The refurb pit will be relined per the requirements in the COA of the APD. Upon completion of the wells on this pad, Kerr-McGee is also requesting to utilize this pit as an ACTS staging pit to be utilized for other completion operations in the area. There will be 2-500 bbl temporary frac tanks placed on the location. The trucks will unload water into these tanks before the water is placed into the refurbed pit. The purpose of the frac tanks is to collect any hydro-carbons that may have been associatedly: with the other completion operations before releasing into the pit. We plan to keep this pit open for 1 year. During this time the surrounding well location completion fluids will be recycled in this pit and utilized for other frac jobs in the surrounding sections.								
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst						
SIGNATURE N/A	,20 ,25 ,0130	DATE 10/25/2010						



The Utah Division of Oil, Gas, and Mining

- State of UtahDepartment of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047512430000

A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the pit.

> Approved by the **Utah Division of** Oil, Gas and Mining

	FORM 9							
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST					
SUNDF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
	sals to drill new wells, significantly deepen ıgged wells, or to drill horizontal laterals. U		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES					
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-25F1BS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047512430000					
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHO treet, Suite 600, Denver, CO, 80217 3779	NE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES					
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL			COUNTY: UINTAH					
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENW Section: 25	IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian:	S	STATE: UTAH					
11. CHE	CK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT,	OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
	ACIDIZE	ALTER CASING	CASING REPAIR					
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME					
	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	□ NEW CONSTRUCTION					
	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK					
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION					
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON					
✓ DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL					
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION					
11/7/2010	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PROPETRO AIR RIG ON NOVEMBER 5, 2010. DRILLED 11" SURFACE HOLE TO 2730'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 50 BBLS FRES Accepted by the WATER. PUMP 20 BBLS GEL WATER. LEAD CEMENT W/ 200 SX CLASS G PRE Vitah Division of @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 170 SX CLASS G PREM LITE @ 518 Gas and Mining PPG, 1.15 YD. DROP PLUG ON THE FLY, DISPLACED W/ 161 BBLS WATER RECORD PARTIAL RETURNS. SLOWED DOWN RATE, LIFT PRESSURE WAS 550 PSI, BUMP PLUG & HOLD 850 PSI FOR 5 MIN. FLOAT HELD. TRACE OF CEMENT TO SURFACE; FELL BACK. TOP OUT #1 W/ 125 SX SAME CEMENT. CEMENT TO SURFACE. WORT.								
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst						
SIGNATURE N/A		DATE 11/8/2010						

	FORM 9								
	DEPARTMENT OF NATURAL RESOURD DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST						
SUND	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:						
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	sals to drill new wells, significantly deepe ugged wells, or to drill horizontal laterals.	n existing wells below current Use APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES						
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-25F1BS						
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047512430000						
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PH Street, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 9 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES						
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL			COUNTY: UINTAH						
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENW Section: 25	IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian	: S	STATE: UTAH						
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT,	OR OTHER DATA						
TYPE OF SUBMISSION		TYPE OF ACTION							
	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR						
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME						
SUBSEQUENT REPORT	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT	☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION						
Date of Work Completion:	OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK						
✓ SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION						
Date of Spud: 10/25/2010	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON						
	☐ TUBING REPAIR	☐ VENT OR FLARE	WATER DISPOSAL						
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION						
	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:						
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIXAccepted by the SPUD WELL LOCATION ON OCTOBER 25, 2010 AT 17:00 HRS. Utah Division of Oil, Gas and Mining FOR RECORD ONLY OF THE CONTROL OF THE									
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	R TITLE Regulatory Analyst							
SIGNATURE N/A		DATE 11/1/2010							

BLM - Vernal Field Office - Notification Form

Operator <u>Anadarko</u>	Rig Name/# <u>HP307</u>
Submitted By ROGER BARBE	
2016	
Well Name/Number NBU 921	- 25F1BS
Qtr/Qtr NE/SE Section 2	
Lease Serial Number ML	<u></u>
UO1194ST	
API Number	
43047512430000_	
Spud Notice – Spud is the ini	tial spudding of the well, not drilling
out below a casing string.	, and grant are and are an area
Date/Time	AM PM
· · · · · · · · · · · · · · · · · · ·	
Casing - Please report time of	casing run starts, not cementing
times.	
Surface Casing	RECEIVED
Intermediate Casing	DEC 2 0 2010
Production Casing	DIV. OF OIL, GAS & MINING
Liner	DIV. OF OIL, GAS & WHINING
Other	
Date/Time <u>12/20/2010</u>	<u>10:00</u> AM ⊠ PM □
BOPE	
Initial BOPE test at surfa	ace casing point
	2 .
Initial BOPE test at surfa	2 .

Date/Time AM PM D	
Remarks SHOULD START RUNNING 4.5" PRODUCTION CASING AROUND 10:00 ON 12/20/2010	

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST		
SUNDF	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	sals to drill new wells, significantly deepen exis agged wells, or to drill horizontal laterals. Use A		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 921-25F1BS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047512430000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE N treet, Suite 600, Denver, CO, 80217 3779	1UMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL			COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian: S		STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPORT,	OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
FINISHED DRILLING 1/2" 11.6# I-80 PROD 520 SX CLASS G PRE SX CLASS G 50/50 P CLAYFIX WATER, I RETURNS THROUGHE NOT SEE CEMEN	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF	MBER 19, 2010. RAN 4 ACER, LEAD CEMENT WA AILED CEMENT W/ 1040 ISPLACED W/ 154 BB ATS HELD. HAD ELLE BACK TO SURFACE.	ccepted by the Utah Division of Gas and Mining		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst			
SIGNATURE N/A		DATE 12/22/2010			

SUNDI Do not use this form for propo bottom-hole depth, reenter plud prill form for such proposals 1. TYPE OF WELL Gas Well 2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7.UNIT OF CA AGREEMENT NAME: NATURAL BUTTES 8. WELL NAME and NUMBER: NBU 921-25F1BS 9. API NUMBER: 43047512430000		
	Ph Street, Suite 600, Denver, CO, 80217 37	HONE NUMBER: 79 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2580 FNL 1780 FWL QTR/QTR, SECTION, TOWNSH: Qtr/Qtr: SENW Section: 25	IP, RANGE, MERIDIAN: Township: 09.0S Range: 21.0E Meridian	n: S	COUNTY: UINTAH STATE: UTAH
11.	CK APPROPRIATE BOXES TO INDIC	ATE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
□ NOTICE OF INTENT Approximate date work will start: □ SUBSEQUENT REPORT Date of Work Completion: □ SPUD REPORT Date of Spud: ✓ DRILLING REPORT Report Date: 3/16/2011	□ ACIDIZE □ CHANGE TO PREVIOUS PLANS □ CHANGE WELL STATUS □ DEEPEN □ OPERATOR CHANGE ✓ PRODUCTION START OR RESUME □ REPERFORATE CURRENT FORMATION □ TUBING REPAIR □ WATER SHUTOFF □ WILDCAT WELL DETERMINATION	ALTER CASING CHANGE TUBING COMMINGLE PRODUCING FORMATIONS FRACTURE TREAT PLUG AND ABANDON RECLAMATION OF WELL SITE SIDETRACK TO REPAIR WELL VENT OR FLARE SI TA STATUS EXTENSION OTHER	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION OTHER:
THE SUBJECT WELL 2:30 P.M. THE CHRO	DMPLETED OPERATIONS. Clearly show all p WAS PLACED ON PRODUCTI DNOLOGICAL WELL HISTORY THE WELL COMPLETION R	ON ON MARCH 16, 2011 AT WILL BE SUBMITTED WITH EPORT. OI FOF	Ī
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBE 720 929-6100	Regulatory Analyst	
SIGNATURE N/A		DATE 3/17/2011	

STATE OF UTAH AMENDED REPORT FORM 8 **DEPARTMENT OF NATURAL RESOURCES** (highlight changes) DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG 1a. TYPE OF WELL: 7. UNIT or CA AGREEMENT NAME GAS VIELL WELL OTHER UTU63047A b. TYPE OF WORK: 8. WELL NAME and NUMBER: WEWL Z DIFF. RESVR. RE-ENTRY NBU 921-25F1BS 2. NAME OF OPERATOR: 9. API NUMBER: KERR MCGEE OIL & GAS ONSHORE, L.P. 4304751243 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10 FIELD AND POOL, OR WILDCAT STATE CO ZIP 80217 **NATURAL BUTTES** P.O.BOX 173779 CITY DENVER (720) 929-6100 4. LOCATION OF WELL (FOOTAGES) 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, BHL reviewed AT SURFACE: SENW 2580 FNL 1780 FWL S25, T9S, R21E by HSM SENW 25 9S 21E S AT TOP PRODUCING INTERVAL REPORTED BELOW: SENW 1352 FNL 2290 FWL S25, T9S, R21E 12. COUNTY 13. STATE AT TOTAL DEPTH: SENW 1366 FNL 2306 FWL S25, T9S, R21E UTAH UINTAH 14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: 17. ELEVATIONS (DF, RKB, RT, GL): ABANDONED READY TO PRODUCE 10/25/2010 12/19/2010 4931 GL 3/16/2011 18. TOTAL DEPTH: MD 9.955 19. PLUG BACK T.D.: MD 9.910 21. DEPTH BRIDGE 20. IF MULTIPLE COMPLETIONS, HOW MANY? * MD PLUG SET: TVD 9.759 TVD 9,714 TVD 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) WAS WELL CORED? NO 🗸 YES (Submit analysis) GR/CBL-BHV-SD/DSN/ACTR NO 🗸 WAS DST RUN? YES (Submit report) **DIRECTIONAL SURVEY?** YES NO (Submit copy) 24. CASING AND LINER RECORD (Report all strings set in well) STAGE CEMENTER **CEMENT TYPE &** SLURRY **HOLE SIZE** SIZE/GRADE WEIGHT (#/ft.) TOP (MD) BOTTOM (MD) CEMENT TOP ** AMOUNT PULLED DEPTH NO. OF SACKS VOLUME (BBL) 20" 14" STL 36.7# 40 28 28# 11" 8 5/8" **IJ-55** 2,732 0 495 7 7/8' 4 1/2' **I-80** 11.6# 9,736 1,560 1250 7 7/8" 4 1/2" P110 11.6# 9.736 9,956 25. TUBING RECORD SIZE DEPTH SET (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD) DEPTH SET (MD) PACKER SET (MD) 9.233 2 3/8" 26. PRODUCING INTERVALS 27. PERFORATION RECORD FORMATION NAME TOP (MD) BOTTOM (MD) TOP (TVD) BOTTOM (TVD) INTERVAL (Top/Bot - MD) SIZE NO. HOLES PERFORATION STATUS (A) MESAVERDE 7.850 9.844 7,850 9.844 0.36 162 Open 🗸 Squeezed (B) Squeezed (C) Open Saueezed (D) Squeezed 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND TYPE OF MATERIAL 7850 - 9844 PUMP 9728 BBLS SLICK H2O & 382,902 LBS SAND DIV OF OIL, GAS & MINING 29. ENCLOSED ATTACHMENTS: 30. WELL STATUS: **ELECTRICAL/MECHANICAL LOGS** ✓ DIRECTIONAL SURVEY GEOLOGIC REPORT DST REPORT **PROD** SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION **CORE ANALYSIS** OTHER:

DATE FIRST PR	31. INITIAL PRODUCTION DATE FIRST PRODUCED: TEST DATE: 3/16/2011 3/20/2011					INTERVAL A (As shown in Item #26) HOURS TESTED: TEST PRODUCT RATES: →			L: GAS – MCF: 2,574	WATER -		PROD. METHOD:
3/16/2012 CHOKE SIZE: 20/64	TBG. PRES	S. CSG. P		RAVITY	BTU GAS	GAS/OIL RATIO			L: GAS - MCF:	WATER -	- BBL:	FLOWING INTERVAL STATU PROD
20,0-1					INT	ERVAL B (As sho	um in itom #26)	`	,			1
DATE FIRST PR	RODUCED:	TEST D	ATE:		HOURS TESTER		TEST PRODUCTIO	N OIL - BB	L: GAS MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. P	RESS. API G	RAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	ON OIL - BB	L: GAS – MCF:	WATER -	- BBL:	INTERVAL STATU
					INT	ERVAL C (As sho	wn in item #26)		<u> </u>		· · · · · · · · · · · · · · · · · · ·	<u></u>
DATE FIRST PR	RODUCED: TEST DATE:			HOURS TESTER	D:	TEST PRODUCTION RATES: →	N OIL-BB	OIL - BBL: GAS - MCF:		- BBL:	PROD. METHOD:	
CHOKE SIZE:	TBG. PRES	SS. CSG. P	RESS. API G	API GRAVITY BTU – GAS		GAS/OIL RATIO	24 HR PRODUCTION RATES: →	ON OIL - BB	L: GAS - MCF:	WATER -	- BBL:	INTERVAL STATU
		·		· · · · · · · · · · · · · · · · · · ·	INT	ERVAL D (As sho	wn in item #26)			 		<u></u>
DATE FIRST PRODUCED: TEST DATE:					HOURS TESTED:		TEST PRODUCTIO	OIL - BB	L: GAS – MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRES	SS. CSG. P	RESS. API G	RAVITY	BTU - GAS	24 HR PRODUCTION RATES: →	ON OIL - BB	L: GAS – MCF:	WATER -	- BBL:	INTERVAL STATU	
32. DISPOSITIO	ON OF GAS (Sold, Used for	Fuel, Vented, E	tc.)	<u></u>				and the second of the second o			<u>,, </u>
33. SUMMARY	OF POROUS	ZONES (Inclu	de Aquifers):		***************************************			34. FORMA	TION (Log) MARKERS:			
Show all importa tested, cushion u					als and all drill-sten recoveries.	n tests, including de	epth interval					
Formati	on	Top (MD)	Bottom (MD)		Descrip	otions, Contents, etc	3 .				Top Measured Depth)	
GREEN R BIRD'S NI MAHOGA WASATCI MESAVER	EST .NY H	1,465 1,871 2,457 4,945 7,664	7,664 9,955	TD								

35. ADDITIONAL REMARKS (Include plugging procedure)

Attached is the chronological well history and final survey. Completion chrono details individual frac stages.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) ANDREW LYTLE

TITLE REGULATORY ANALYST

SIGNATURE ____

DATE 4/20/2011

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Operation Summary Report

Well: NBU 921-25F1BS-GREEN Spud Conductor: 10/26/2010 Spud Date: 11/5/2010 Project: UTAH-UINTAH Site: NBU 921-25F PAD Rig Name No: H&P 307/307, PROPETRO/ Event: DRILLING Start Date: 11/5/2010 End Date: 12/21/2010

Active Datum: RKB @4,956.00ft (above Mean Sea	UWI: NBU 921-25F1BS
Lovely	

Active Datum: RKB @4,956.00ft (above Mean Sea Level)					UWI: NBU 921-25F1BS						
Date	 I de diches de la 	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)			
11/5/2010	5:30	- 6:30	1.00	MIRU	01	С	Р	SKID RIG IN OFF NBU 921-25F3AS			
	6:30	- 8:00	1.50	MIRU	01	В	P	RIG UP			
	8:00	- 8:30	0.50	DRLSUR	06	Α	P	P/U MM,M/U 11" SURF. BIT			
		- 10:00	1.50	DRLSUR	02	Α	P	SPUD SURFACE 11-5-2010 @ 08:30. DRILL 11" SURFACE HOLE F/40'-210' (170' @ 113'/HR) PSI ON/ OFF 690/410, UP/ DOWN/ ROT 27/22/25. 530 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB			
		- 12:00	2.00	DRLSUR	06	Α	Р	TOOH, PU AND ORIENT DIR BHA, TIH TO BOTTOM			
		- 18:00	6.00	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/210'-900' (690' @ 115'/HR) PSI ON/ OFF 1100/850, UP/ DOWN/ ROT57/53/55. 530 GPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM CIRCULATING RESERVE PIT			
	18:00	- 0:00	6.00	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/900'-1360' (460' @ 77'/HR) PSI ON/ OFF 1250/1000, UP/ DOWN/ ROT65/50/55. 530 GPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM CIRCULATING RESERVE PIT			
11/6/2010	0:00	~ 6:00	6.00	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/1360'-1660' (300' @ 50'/HR) PSI ON/ OFF 1400/1200, UP/ DOWN/ ROT62/55/58. 530 GPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM CIRCULATING RESERVE PIT			
	6:00	- 17:30	11.50	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/1660'-2350' (690' @ 60'/HR) PSI ON/ OFF 1600/1300, UP/ DOWN/ ROT73/65/68. 530 GPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM CIRCULATING RESERVE PIT			
	17:30	- 0:00	6.50	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/2350'-2620' (270' @ 42'/HR) PSI ON/ OFF 1650/1450, UP/ DOWN/ ROT 74/67/70. 530 GPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM CIRCULATING RESERVE PIT			
11/7/2010		- 1:00	2.00	DRLSUR	02	D	Р	DRILL/ SLIDE 11" SURFACE HOLE F/2620'-2730' (110' @ 55'/HR) PSI ON/ OFF 1650/1450, UP/ DOWN/ ROT 74/67/70. 530 GPM 18-20K WOB, 45 RPM ON TOP DRIVE,MM ROT 85 RPM CIRCULATING RESERVE PIT(TD 11" DIR. SURF. HOLE @ 01:00)			
		- 2:30	1.50	DRLSUR	05	С	P	CIRC & COND HOLE F/TOH & 85/8" SURF. CSG			
		- 8:00	5.50	DRLSUR	06	D	P	TOH,L/D DRILLSTRING & 11" BHA & DIR. TOOLS			
	8:00	- 9:00	1.00	DRLSUR	12	В	P	R/U T/RUN 85/8" 28# SURF. CSG			
	9:00	- 12:30	3.50	DRLSUR	12	С	Р	HOLD SAFTEY MEETING RUN SHOE, SHOE JNT, BAFFEL & 60 JNTS 8 5/8" 28# LT&C CSG			

4/12/2011 10:26:34AM W/THE SHOE @ 2711' & BAFFEL @ 2664'

Operation Summary Report

Well: NBU 921-25F1BS-GREEN Spud					: 10/26/2	2010	Spud Date: 11/5/2010
Project: UTAH-UINTAH Site: NI					5F PAD		Rig Name No: H&P 307/307, PROPETRO/
Event: DRILLING Start D			Start Da	te: 11/5/	2010		End Date: 12/21/2010
Active Datum: RKB @4,956.00ft (above Mean Selevel)			n Sea	UWI: N	BU 921-	25F1BS	
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
	12:30 - 14:30	2.00	DRLSUR	12	E	P	HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 50 BBLS OF 8.4# H20 AHEAD. FULL CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. FULL CIRC. PUMP 200 SX(136 BBLS) 11# 3.82 YIELD LEAD CEMENT, PUMP 170 SX (35 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). FULL CIRC. DROP PLUG ON FLY AND DISPLACE W/161 BBLS OF 8.4# H20. PARTIAL RETURNS, SLOWED DOWN RATE, LIFT PRESSURE WAS 550 PSI, BUMP PLUG AND HOLD 850 PSI FOR 5 MIN. FLOAT HELD.
	14:30 - 15:00	0.50	DRLSUR	12	F	Р	TOP OUT #1 PUMP 125 SX (26 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE). CMT TO SURFACE. RIG DOWN CEMENTERS AND RELEASE RIG @ 15:00 11/07/2010
	15:00 - 23:00	8.00	DRLSUR	01	E	P	CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28
							SPUD DATE/TIME: 11/5/2010 8:30
							SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,730 Total SURFACE hours: 39.50 Surface Casing size: 8.625" # of casing joints ran: 61 Casing set MD: 2711' # sx of cement: 200/170/125 Cement blend (ppg:) 11/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: 2 Describe cement issues: NONE Describe hole issues: NONE
12/13/2010	16:00 - 16:30	0.50	MIRU	01	С	P	PREPARE TO SKID RIG
	16:30 - 17:30	1.00	MIRU	01	С	Р	SKID RIG
	17:30 - 18:00	0.50	MIRU	12	Α	P	CHANGE OUT CASING BALES AND ELEVATORS
	18:30 - 18:30 18:30 - 23:30	0.50 5.00	MIRU PRPSPD	14 15	A A	Þ	NIPPLE UP BOP PRESSURE TEST BOP, RAMS, CHOKE, CHOKE LINE, KILL LINE TIW VALVE, I BOP,@ 5000 PSI, ANNULAR @ 2500 PSI, CASING @ 1500PSI
	23:30 - 0:00	0.50	PRPSPD	07	Α	Р	RIG SERVICE
12/14/2010	0:00 - 2:00	2.00	PRPSPD	80	В	Z	TROUBLE SHOOT I BOP AND CHANGE OUT SAME
	2:00 - 2:30	0.50	PRPSPD	15	Α	Р	PRESSURE TEST I BOP
	2:30 - 3:00	0.50	PRPSPD	14	В	P	INSTALL WEAR BUSHING
	3:00 - 4:00	1.00	PRPSPD	06	Α	Р	P/U BIT AND MUD MOTOR, SCRIBE AND INSTALL MWD TOOL
	4:00 - 6:00	2.00	PRPSPD	06	A -	P	T.I.H., INSTALL ROTATING HEAD, TAG CEMENT @ 2640'
	6:00 - 7:00	1.00	DRLPRO	02	F	P -	DRILL CEMENT AND FLOAT EQUIPMENT
	7:00 - 15:00	8.00	DRLPRO	02	С	P	DRILL (ROTATE & SLIDE) F/ 2766'=3299' @ 68.5 FPH, WOB/ 16-18K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 1350-OFF1125, TORQUE/ ON 6K-OFF 4K, P/U 120, S/O 92, ROT 102

4/12/2011 10:26:34AM 2

Operation Summary Report

Spud Conductor: 10/26/2010 Well: NBU 921-25F1BS-GREEN Spud Date: 11/5/2010 Project: UTAH-UINTAH Site: NBU 921-25F PAD Rig Name No: H&P 307/307, PROPETRO/

Event: DRILLING Start Date: 11/5/2010 End Date: 12/21/2010 UWI: NBU 921-25F1BS Active Datum: RKB @4,956.00ft (above Mean Sea

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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
V 10. X 2	15:00 - 15:30	0.50	DRLPRO	07	Α	Þ	<u> </u>	RIG SERVICE
12/15/2010	15:30 - 0:00 0:00 - 6:00	8.50 6.00	DRLPRO DRLPRO	02	C C	P		DRILL (ROTATE & SLIDE) F/ 3299-4077 @ 91.5 FPH, WOB/ 17-18K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 1600-OFF1375, TORQUE/ ON 10.5- OFF 7.5, P/U 140, S/O 103, ROT 118, SLIDE TIME 6.25, SLIDE FOOTAGE 312, SLIDE % 23.04 DRILL (ROTATE & SLIDE) F/ 4077-4482 @ 67.5
								FPH, WOB 18-20K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 1600-OFF 1200, TORQUE/ ON 11K-OFF 6K, P/U 146, S/O 108, ROT 123
	6:00 - 16:30	10.50	DRLPRO	02	C	P		DRILL (ROTATE & SLIDE) F/ 4482-5470 @ 94 FPH, WOB 18-20K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 1820-OFF 12001570, TORQUE/ ON 11K-OFF 9K, P/U 172, S/O 128, ROT 140
	16:30 - 17:00	0.50	DRLPRO	07	Α	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRO		С	Р		DRILL (ROTATE & SLIDE) F/ 5470-6130 @ 94.2 FPH, WOB 18-20K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 1965-OFF 1680, TORQUE/ ON 11K-OFF 9K, P/U 187, S/O 128, ROT 149,SLIDE FOOTAGE 452, SLIDE TIME 10.5, SLIDE% 22.11
12/16/2010	0:00 - 6:00	6.00	DRLPRO	02	С	Р		DRILL (ROTATE & SLIDE) F/ 6130-6665 @ 89 FPH, WOB/ 17-20K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 1950-OFF 1700, TORQUE/ ON 10.8-OFF 10, P/U 190, S/O 129, ROT 151 MUD WT. 8.7, VIS 32
	6:00 - 17:00	11.00	DRLPRO	02	С	Р		DRILL (ROTATE & SLIDE) F/ 6665-7262 @ 54.2 FPH, WOB/ 17-20K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 2050-OFF 1775, TORQUE/ ON 11-OFF 10, P/U 201, S/O 130, ROT 159 MUD WT. 9.4, VIS 36
	17:00 - 17:30	0.50	DRLPRO	07	Α	₽		RIG SERVICE
	17:30 - 0:00	6.50	DRLPRO	02	С	Р		DRILL (ROTATE & SLIDE) F/ 7262-7570 @ 47.3 FPH, WOB/ 17-22K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 2150-OFF 1875, TORQUE/ ON 12.8-OFF 11, P/U 225, S/O 137, ROT 169 MUD WT. 9.7, VIS 36
12/17/2010	0:00 - 6:00	6.00	DRLPRO	02	С	P		DRILL (ROTATE & SLIDE) F/ 7570-7880 @ 51.6 FPH, WOB/ 18-22K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, TORQUE/ ON 13-OFF 12, P/U 228 S/O 139, ROT 171, MUD WT. 10.3, VIS 41
	6:00 - 17:00	11.00	DRLPRO	02	С	P		DRILL (ROTATE & SLIDE) F/ 7880-8489 @ 55.3 FPH, WOB/ 18-22K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, TORQUE/ ON 14-OFF 15, P/U 230 S/O 139, ROT 172, MUD WT. 10.6, VIS 41
	17:00 - 17:30	0.50	DRLPRO	07	Α	Ρ		RIG SERVICE
	17:30 - 0:00	6.50	DRLPRO	02	С	Р		DRILL (ROTATE & SLIDE) F/ 8489-8716 @ 34.9 FPH, WOB/ 18-22K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, TORQUE/ ON 14-OFF 15, P/U 241 S/O 148, ROT 183, MUD WT. 10.9, VIS 41, SLIDE FOOTAGE 35, SLIDE TIME2.83, SLIDE%3.05
12/18/2010	0:00 - 7:00	7.00	DRLPRO	02	С	Р		DRILL (ROTATE & SLIDE) F/ 8716-8965 @ 35.5 FPH, WOB/ 19-23K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 2820-OFF 2600, TORQUE/ ON 16.5-OFF 16, P/U 245, S/O 149, ROT 185, MUD WT. 11.3, VIS 40
	7:00 - 8:00	1.00	DRLPRO	05	С	Р		CIRC. & COND. / BUILD SLUG FOR BIT TRIP
	8:00 - 11:30	3.50	DRLPRO	06	Α	P		P.O.O.H. FOR BIT
	11:30 - 12:00	0.50	DRLPRO	14	В	Р		PULL ROTATING HEAD

4/12/2011 10:26:34AM

Operation Summary Report

Spud Date: 11/5/2010 Well: NBU 921-25F1BS-GREEN Spud Conductor: 10/26/2010

Site: NBU 921-25F PAD Project: UTAH-UINTAH Rig Name No: H&P 307/307, PROPETRO/

Start Date: 11/5/2010 Event: DRILLING End Date: 12/21/2010

UWI: NBU 921-25F1BS Active Datum: RKB @4,956.00ft (above Mean Sea

Level)	RKB @4,956.00ft (-25F1BS	
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
<u> Brail, Pala institatii la</u>	12:00 - 12:30	0.50	DRLPRO	07	A	Р	RIG SERVICE
	12:30 - 14:00 14:00 - 18:00	1.50	DRLPRO	06	A	P P	P.O.O.H. / L/D MWD TOOL, BREAK BIT AND MOTOR, L/D BIT AND MOTOR, P/U NEW MOTOR AND BIT, SCRIBE IN AND INSTALL MWD TOOL T.I.H. WASH LAST 100' TO BOTTOM
	18:00 - 0:00	6.00	DRLPRO	02	С	Р	DRILL (ROTATE & SLIDE) F/ 8965-9217 @ 42 FPH,WOB/16-20K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 2580-OFF 2240, TORQUE/ ON 16.5-OFF15, P/U 252, S/O 151, ROT 187, SLIDE TIME 2HRS, SLIDE FOOTAGE 25', SLIDE% 5
12/19/2010	0:00 - 6:00	6.00	DRLPRO	02	С	Р	DRILL (ROTATE & SLIDE) F/ 9217-9493 @ 46 FPH, WOB/ 19-23K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 2820-OFF 2600, TORQUE/ ON 16.5-OFF 16, P/U 253, S/O 151, ROT 189, MUD WT. 11.9, VIS 40
	6:00 - 17:00	11.00	DRLPRO	02	С	P ·	DRILL (ROTATE & SLIDE) F/ 9493-9955 @ 42 FPH, WOB/ 19-23K, ROTARY RPM/ 0-45, STRKS/ 110 @ 495 GPM, SPP/ ON 2820-OFF 2600, TORQUE/ ON 18-OFF 18, P/U 259, S/O 153, ROT 193, MUD WT. 12.3, VIS 40
	17:00 - 18:00	1.00	DRLPRO	05	С	Р	CIRC. & COND. / BUILD SLUG
	18:00 - 23:30	5.50	DRLPRO	06	E	Р	P.O.O.H. FOR WIPER TRIP / BACK REAM 25 STNDS OUT
	23:30 - 0:00	0.50	DRLPRO	07	Α	P	RIG SERVICE
12/20/2010	0:00 - 6:00	6.00	DRLPRO	06	E	Р	WIPER TRIP P.O.O.H. TO SURFACE SHOE, T.I.H. T/ 9650'
	6:00 - 7:30	1.50	DRLPRO	03	E	Р	WASH AND REAM TO BOTTOM
	7:30 - 9:00	1.50	DRLPRO	05	С	P	CIRC. & COND. / PUMP SWEEPS
	9:00 - 14:00	5.00	DRLPRO	06	В	Р	P.O.O.H. FOR OPEN HOLE LOGS
	14:00 - 15:00	1.00	DRLPRO	06	В	Ρ	BREAK BIT AND MUD MOTOR / L/D MOTOR
	15:00 - 16:30	1.50	DRLPRO	21	Ε	Z	WAIT ON HALLIBURTON LOGGERS / SLIP AND CUT DRILLING LINE
	16:30 - 17:00	0.50	DRLPRO	07	Α	₽	RIG SERVICE
	17:00 - 17:30	0.50	DRLPRO	11	D	Р	HOLD SAFETY MEETING WITH HALLIBURTON AND RIG UP LOGGERS
	17:30 - 22:00	4.50	DRLPRO	11	D	Р	RUN OPEN HOLE TRIPPLE COMBO LOGS
	22:00 - 0:00	2.00	DRLPRO	11	D	Р	RIG DOWN HALLIBURTON LOGGERS
12/21/2010	0:00 - 0:30	0.50	DRLPRO	14	В	P	PULL WEAR BUSHING
	0:30 - 1:00	0.50	DRLPRO	12	Α	Р	CHANGE OUT BAILS AND ELEVATORS
	1:00 - 2:30	1.50	DRLPRO	12	Α	Р	HELD SAFETY MEETING WITH CASING CREW AND RIGGED UP CASING EQUIP.
	2:30 - 11:00	8.50	DRLPRO	12	С	P	MAKE UP FLOAT SHOE AND FLOAT COLLAR, RUN 5 JTS 11.6# P-110, 232 JTS AND 2 MARKER JTS 11.6# I-80 4.5" CASING SET SHOE @ 9941' FLOAT COLLAR @ 9897' MARKERS @ 7619' & 4946'
	11:00 - 11:30	0.50	DRLPRO	23		P	HELD SAFETY MEETING & REVIEW JSA/ RIG DOWN CASERS
	11:30 - 13:30	2.00	DRLPRO	05	D	P	CIRC. & COND.
	13:30 - 14:00	0.50	DRLPRO	23		P	HELD SAFETY MEETING & REVIEW JSA WITH CEMENTERS

4/12/2011 10:26:34AM

Operation Summary Report

Well: NBU 921-25F1BS-GREEN		Spud Co	onductor	: 10/26/2	2010	Spud Date: 11/5/2010
Project: UTAH-UINTAH		Site: NB	U 921-2	5F PAD		Rig Name No: H&P 307/307, PROPETRO/
Event: DRILLING	****	Start Da	te: 11/5/	2010		End Date: 12/21/2010
Active Datum: RKB @4,956.00ft (above Mean Sea Level)			UWI: N	BU 921	25F1BS	
Date Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
14:00 - 16:00	2.00	DRLPRO	12	E	Р	CEMENT PROD. CASING, PUMPED 40 BBL SPACER,520 SKS 12.6 PPG 1.93 YIELD LEAD, 1040 SKS 14.3 PPG 1.25 YIELD TAIL, DISPLACED WITH 154 BBLS CLAYFIX WATER, BUMPED PLUG WITH 3256 PSI, FLOATS HELD, HAD FULL RETURNS THROUGHOUT JOB, GOT 39 BBLS SPACER WATER BACK TO SURFACE DID NOT SEE CEMENT TO SURFACE
16:00 - 16:30	0.50	DRLPRO	12	Α	P	REVIEW JSA RIGGING DOWN CEMENTERS, RIG DOWN HALLIBURTON
16:30 - 17:00	0.50	DRLPRO	21	E	Р	FLUSH AND BLOW DOWN ALL SURFACE LINES, FLUSH BOP
17:00 - 18:00	1.00	DRLPRO	14	Α	Р	NIPPLE DOWN BOP AND SET CASING SLIPS WITH 90K IN SLIPS, CUT OFF & L/D CASING
18:00 - 20:00	2.00	DRLPRO	01	Ε	Р	PREPARE TO SKID RIG/ RELEASE RIG @ 20:00
20:00 - 20:00	0.00	DRLPRO	01	E	P	PRODUCTION: Rig Move/Skid start date/time: 12/13/2010 16:30 Rig Move/Skid finish date/time: 12/13/2010 17:3 Total MOVE hours: 1.0 Prod Rig Spud date/time: 12/14/2010 7:00 Rig Release date/time: 12/21/2010 20:00 Total SPUD to RR hours:181.0 Planned depth MD 9,942 Planned depth TVD 9,744 Actual MD: 9,955 Actual TVD: 9,758 Open Wells \$: \$817,815 AFE \$: \$864,039 Open wells \$/ft: \$82.15 PRODUCTION HOLE: Prod. From depth: 2,707 Prod. To depth: 9,955 Total PROD hours: 117 Log Depth: 9935 Float Collar Top Depth: 9897 Production Casing size: 4 1/2 # of casing joints ran: 237 Casing set MD: 9,941.5 Stage 1 # sx of cement: 520 LEAD 1040 TAIL Cement density (ppg:) 12.6 PPG LEAD 14.3 PPC TAIL Cement yield (ft3/sk): 1.93 LEAD 1.25 TAIL Stage 2 # sx of cement: Cement density (ppg:) Cement yield (ft3/sk): Top Out Cmt # sx of cement:
						Cement yield (ft3/sk): Est. TOC (Lead & Tail) or 2 Stage : 45.5' LEAD 447 TAIL Describe cement issues: NONE Describe hole issues: NONE DIRECTIONAL INFO: KOP: 200 Max angle: 20.69 Departure: 1322.00

4/12/2011 10:26:34AM

					US	ROCK	(IES R	EGION
				0	perat	ion S	umma	ary Report
Well: NBU 921	-25F1BS	-GREEN	St. Aprophysics	Spud C	onductor:	10/26/2	010	Spud Date: 11/5/2010
Project: UTAH-	UINTAH			Site: NE	SU 921-25	F PAD		Rig Name No: GWS 1/1
Event: COMPL	ETION			Start Da	ite: 2/21/2	2011		End Date: 3/16/2011
Active Datum: I Level)	RKB @4	,956.00ft (a	bove Mean	Sea	UWI: N	BU 921-:	25F1BS	
Date		ime rt-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
2/28/2011		- 7:00	0.50	COMP	48	C.3.7.7.2L.	Р	HSM & JSA W/SUPERIOR WELL SERVICES.
	7:45	- 9:00	1.25	COMP	37	В	P	09:00 - OPEN WELL. WHP = 0 PSI. PERF STG 1) PU 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE, 80 & 120 DEG PHASING. RIH & PERF MV F/ 9784-86, 3 SPF, 6 HOLES. 9671-73, 3 SPF, 6 HOLES. 9583-85, 3.5 SPF, 7 HOLES. 21 HOLES. POOH, X-OVER FOR FRAC CREW.
2/4/2044	e-30	6.50	0.22	COMP			Б	SWI - SDFN. FREEZE PROTECT WH. PREP TO FRAC IN AM.
3/1/2011		- 6:50 - 11:14	0.33 0.47	COMP	48 36	E	P P	HSM & JSA W/SUPERIOR 10:46 OPEN WELL FRAC STG 1) WHP 1658 PSI, BRK DWN 3.7 BPM @ 3652 PSI. ISIP 3306 PSI, FG 0.78, PMP 6 BBLS 15% HCL, PMP 145 BBLS 10/M SCALE INHIBITOR. PUMP 250 BBLS @ 45.6 BPM @ 6242 PSI, 20/21 PERFS OPEN = 97%
3/2/2011		- 12:20 - 7:00	1.10 0.50	COMP	37 48	В	P	MP 6644 PSI, MR 46.3 BPM, AP 5913 PSI, AR 41.2 BPM, ISIP 2965 PSI, FG 0.74, NPI (-341) PSI. PMP 967 BBLS SW & 24,464 LBS OF 30/50 SND & 4,974 LBS OF 20/40 SLC SND. TOTAL PROP 29,438 LBS, SWI, 11:14:00 X-OVER FOR WL. PERF STG 2) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9,468', P/U & PERF MV F/ 9366-68, 4 SPF, 8 HOLES. 9260-63, 4 SPF, 12 HOLES. 9247-48, 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW. HSM & JSA W/SUPERIOR
	7:00	- 7:00	0.00	COMP	37			PERF STG 2) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9,468', P/U & PERF MV F/ 9366-68, 4 SPF, 8 HOLES. 9260-63, 4 SPF, 12 HOLES. 9247-48, 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
·	10:30	- 10:56	0.43	COMP	36	E	Р	10:30 OPEN WELL FRAC STG 2) WHP 1729 PSI, BRK DWN 3.8 BPM @ 3639 PSI. ISIP 2636 PSI, FG 0.72. PUMP 129 BBLS @ 43.5 BPM @ 6374 PSI. 15/24 PERFS OPEN = 64%
							**************************************	MP 6698 PSI, MR 48.1 BPM, AP 6242 PSI, AR 46.7 BPM, ISIP 3145 PSI, FG 0.78, NPI 509 PSI. PMP 1012 BBLS SW & 32,722 LBS OF 30/50 SND & 5,296 LBS OF 20/40 SLC SND. TOTAL PROP 39,018 LBS, SWI, 10:56 X-OVER FOR WL.

4/20/2011 9:55:11AM

			o				EGION ary Report		
Wall-NDLL021	-25F1BS-GREEN			onductor			Spud Date: 11/		
Project: UTAH-				U 921-2		2010	Spud Date: 11/	Rig Name No: GWS 1/1	
Event: COMPL				te: 2/21/	·	<u> </u>		End Date: 3/16/2011	
	RKB @4,956.00ft (above Mean				 -25F1BS		Life Date: 0/10/2011	
Level)									
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation	
	10:56 - 11:45 13:49 - 15:00	1.18	COMP	37	B	P		PERF STG 3) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9,222', P/U & PERF MV F/ 9190-92, 3 SPF, 6 HOLES. 9162-64, 3 SPF, 6 HOLES. 9141-42, 3 SPF, 3 HOLES. 9118-20, 3 SPF, 6 HOLES. 9189-90, 3 SPF, 3 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW. 13:49 OPEN WELL FRAC STG 3) WHP 1668 PSI, BRK DWN 3.7 BPM @ 3263 PSI. ISIP 2804 PSI, FG 0.75. PUMP 250 BBLS @ 45.8 BPM @ 5847 PSI. 19/24 PERFS OPEN = 81%	
	15:00 - 16:00 17:52 - 18:21	1.00	СОМР	37	В	P		MP 6803 PSI, MR 50.8 BPM, AP 6091 PSI, AR 47 BPM, ISIP 3256 PSI, FG 0.79, NPI 452 PSI. PMP 2480 BBLS SW & 94,709 LBS OF 30/50 SND & 4,841 LBS OF 20/40 SLC SND. TOTAL PROP 99,550 LBS, SWI, 15:00 X-OVER FOR WL. PERF STG 4) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9,047', P/U & PERF MV F/ 9014-17, 4 SPF, 12 HOLES. 8955-58, 4 SPF, 12 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW 17:52 OPEN WELL	
	18:21 - 19:20	0.98	COMP	37	В	P		FRAC STG 4) WHP 2143 PSI, BRK DWN 3.7 BPM @ 3044 PSI. ISIP 2212 PSI, FG 0.60. PUMP 163 BBLS @ 50.6 BPM @ 5929 PSI. 19/24 PERFS OPEN = 78% MP 6683 PSI, MR 51.7 BPM, AP 5458 PSI, AR 50.3 BPM, ISIP 2607 PSI, FG 0.73, NPI 395 PSI. PMP 1261 BBLS SW & 44,681 LBS OF 30/50 SND & 5,229 LBS OF 20/40 SLC SND. TOTAL PROP 49,910 LBS, SWI, 18:21 X-OVER FOR WL. PERF STG 5) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8,905', P/U & PERF MV F/ 8827-28, 3 SPF, 3 HOLES. 8778-80, 3 SPF, 6 HOLES. 8778-80, 3 SPF, 3 HOLES. 8761-62, 3 SPF, 3 HOLES. 8766-07, 3 SPF, 3 HOLES. 8766-07, 3 SPF, 3 HOLES. 21 HOLES. POOH, X-OVER FOR FRAC CREW.	
3/3/2011	6:30 - 7:00	0.50	COMP	48		Р		SWI-SDFN. FREEZE PROTECT WH. PREP TO FRAC IN AM. HSM & JSA W/SUPERIOR	

4/20/2011 9:55:11AM

Well: NBU 921-25F1BS-GREEN		Spud Co	nductor:	10/26/20	010 Spud Date: 11	5/2010	
Project: UTAH-UINTAH		Site: NB	U 921-25	F PAD		Rig Name No: GWS 1/1	
Event: COMPLETION		Start Da	te: 2/21/2	2011		End Date: 3/16/2011	
Active Datum: RKB @4,956.00ft (ab	ove Mean S	Sea	UWI: N	3U 921-2	25F1BS		
Start-End	Duration (hr)	Phase	Code	Sub Code	P/U MD From (ft)	Operation	
9:10 - 9:48	0.63	COMP	36	E	P	08:10 OPEN WELL FRAC STG 5) WHP 1905 PSI, BRK DWN 6 BPM @ 3505 PSI. ISIP 2235 PSI, FG 0.69. PUMP 215 BBLS @ 50.1 BPM @ 5873 PSI. 19/24 PERFS OPEN = 78%	
9:48 - 10:45	0.95	COMP	37	В	Р	MP 6418 PSI, MR 52 BPM, AP 5193 PSI, AR 49 BPM, ISIP 2588 PSI, FG 0.73, NPI 353 PSI. PMP 1581 BBLS SW & 61,758 LBS OF 30/50 SND & 3,889 LBS OF 20/40 SLC SND. TOTAL PROP 65,647 LBS, SWI, 09:48 X-OVER FOR WL. PERF STG 6) PU 4 1/2 8K HAL CBP & 3 1/8 EXP	
			•			GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8,381, P/U & PERF MV F/ 8280-81, 3 SPF, 3 HOLES. 8248-50, 3 SPF, 6 HOLES. 8174-76, 3 SPF, 6 HOLES. 8168-69, 3 SPF, 3 HOLES. 8141-42, 3 SPF, 3 HOLES.	
14:44 - 15:15	0.52	СОМР	36	E	P	8091-92, 3 SPF, 3 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW. 14:44 OPEN WELL FRAC STG 6) WHP 896 PSI, BRK DWN 3.7 BPM @ 3872 PSI. ISIP 1960 PSI, FG 0.67. PUMP 162 BBLS @ 48.6 BPM @ 5962 PSI. 16/24 PERFS OPEN = 67%	
15:15 - 16:05	0.83	COMP	37	В	P	MP 6200 PSI, MR 51.1 BPM, AP 5296 PSI, AR 49.6 BPM, ISIP 2536 PSI, FG 0.75, NPI 620 PSI. PMP 1223 BBLS SW & 40,807 LBS OF 30/50 SND & 8,351 LBS OF 20/40 SLC SND. TOTAL PROP 49,158 LBS, SWI, 15:15 X-OVER FOR WL. PERF STG 7) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8,041', P/U & PERF MV F/	
17:11 - 17:55	0.73	COMP	36	Ε	P	7980-81, 4 SPF, 4 HOLES. 7966-67, 4 SPF, 4 HOLES. 7927-28, 4 SPF, 4 HOLES. 7897-98, 4 SPF, 4 HOLES. 7860-61, 4 SPF, 4 HOLES. 7850-51, 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW. 17:11 OPEN WELL FRAC STG 7) WHP 1220 PSI, BRK DWN 3.4 BPM 2275 PSI. ISIP 1285 PSI, FG 0.60. PUMP 165 BBLS @ 48.4 BPM @ 5534 PSI. 16/24 PERFS OPEN =67% [28 BBL PMPD - SD - CLAMP TO PONY ROD & PLUNGER CAME OFF - REPAIR & RESUME PMPG] MP 6448 PSI, MR 50.8 BPM, AP 5179 PSI, AR 50 BPM, ISIP 2051 PSI, FG 0.70, NPI 766 PSI. PMP 1205 BBLS SW & 40,062 LBS OF 30/50 SND & 10,119 LBS OF 20/40 SLC SND. TOTAL PROP	

4/20/2011 9:55:11AM 3

US ROCKIES REGION Operation Summary Report Well: NBU 921-25F1BS-GREEN Spud Conductor: 10/26/2010 Spud Date: 11/5/2010 Project: UTAH-UINTAH Site: NBU 921-25F PAD Rig Name No: GWS 1/1 **Event: COMPLETION** Start Date: 2/21/2011 End Date: 3/16/2011 Active Datum: RKB @4,956.00ft (above Mean Sea UWI: NBU 921-25F1BS Level) Date Time Duration Phase Code Sub P/U MD From Operation Start-End (hr) Code (ft) 17:55 - 18:40 KILL PLG) PU 4 1/2 8K HALCO CBP, RIH SET CBP COMP 34 0.75 @ 0000. POOH & LD TOOLS. SWI-RD CUTTERS WL & SUPERIOR FRAC. 00:00 SDFN. PREP WELL TO RIH W/BHA & D/O CBPs. TOTAL WATER USED 9,728 BBLS TOTAL 30/50 SAND USED 339,203 LBS TOTAL 20/40 RCS USED 43,699 LBS TOTAL SCALE INHIBITOR USED 936 GAL TOTAL BIOCIDE USED 181 GAL 3/15/2011 HSM, SLIPS, TRIPS & FALLS, RIGIING UP & DOWN 7:00 - 7:15 0.25 COMP 48 IN THE MUD. MIRU, HAD A HARD TIME GETTING BACKED UP 7:15 - 16:00 8.75 COMP Р 31 1

Ρ

7:00 - 7:15

0.25

COMP

48

3/16/2011

TO WH IN THE MUD, ND WH, NU BOP, RU FLOOR & TBG EQUIP, TALLY & PU TBG TO KILL PLUG @ 7,800', RU POWER SWIVEL FOR D/O IN AM, SDFN.

HSM, SLIPS, TRIPS & FALLS, WORKING AROUND

POWER SWIVEL, NO LOOSE CLOTHING.

4/20/2011 9:55:11AM

Well: NBU 921-2	25F1BS-GREEN		Spud C	onductor	: 10/26/2	2010	Spud Date: 11/5/2010		
Project: UTAH-L	JINTAH		Site: NE	BU 921-2	5F PAD			Rig Name No: GWS 1/1	
Event: COMPLE	TION		Start Da	te: 2/21/	2011		***************************************	End Date: 3/16/2011	
Active Datum: R Level)	KB @4,956.00ft	(above Mean	Sea	Sea UWI: NBU 921-25F1BS					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation	
	7:15 - 17:00	9.75	COMP	44	С	Р		HOOK UP PUMP LINES & FILL TBG, BREAK CIRC, PRESS TEST BOP TO 3,000 PSI, START DRLG PLUGS. ALL SURFACE CSG VAVLES OPEN TO ATMOSPHERE.	
								C/O 10' SAND, TAG 1ST PLUG @ 7,807' DRL PLUG IN 7 MIN. 400 PSI INCREASE RIH, CSG PRESS 0 PSI.	
								C/O 30' SAND, TAG 2ND PLUG @ 8,003' DRL PLUG IN 6 MIN. 200 PSI INCREASE RIH, CSG PRESS 150 PSI.	
								C/O 40' SAND, TAG 3RD PLUG @ 8,312' DRL PLUG IN 6 MIN. 300 PSI INCREASE RIH, CSG PRESS 500 PSI. FLOW LINE PLUGGED HAD TO UNPLUG.	
								C/O 20' SAND, TAG 4TH PLUG @ 8,860' DRL PLUG IN 7 MIN. 500 PSI INCREASE RIH, CSG PRESS 450 PSI.	
								C/O 30' SAND, TAG 5TH PLUG @ 9,047' DRL PLUG IN 6 MIN. 250 PSI INCREASE RIH, CSG PRESS 450 PSI. FLOW LINE PLUGGED HAD TO UNPLUG.	
								C/O 30' SAND, TAG 6TH PLUG @ 9,222' DRL PLUG IN 7 MIN. 150 PSI INCREASE RIH, CSG PRESS 650 PSI. HAD TEE WASH OUT 0N FLOWLINE HAD TO C/O.	
								C/O 20' SAND, TAG 7TH PLUG @ 9,468' DRL PLUG IN 6 MIN. 100 PSI INCREASE RIH, CSG PRESS 750 PSI.	
								PBTD 9,908', BTM PERF @ 9,786', TAGGED @ 9,810', C/O FROM 9,810' TO 9,866', 80' PAST BTM PERF, W/ 311 JTS 2 3/8" L-80 TBG, LD 20 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 291 JTS 2 3/8" L-80, EOT 9,232.98'.	
								RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF TO SHEAR OFF BIT W/ 3,100 PSI, LET BIT FALL FOR 20 MIN.	
								TURN OVER TO FLOW BACK CREW. RD & MOVE TO LAST WELL ON PAD, SDFN.	
								KB= 25' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 315 JTS 291 JTS 2 3/8" L-80 = 9,204.95' USED 291 JTS POBS= 2.20' RETURNED 24 JTS (1 W/ BAD THREADS) EOT @ 9,232.98' SN @ 9,230.78'	
	14:30 - 14:30	0.00	PROD	50				TWTR= 9,728 BBLS TWR= 1,200 BBLS TWLTR= 8,528 BBLS WELL TURNED TO SALES @ 1430 HR ON 3/16/11 1200 MCFD, 1920 BWPD, CP 2450#, FTP 100#, CK 20/64"	

4/20/2011 9:55:11AM 5

				CIES REGION ummary Report
Well: NBU 921	-25F1BS-GREEN	Spud Conduc	tor: 10/26/2	010 Spud Date: 11/5/2010
Project: UTAH	-UINTAH	Site: NBU 921	-25F PAD	Rig Name No: GWS 1/1
Event: COMPL	ETION	Start Date: 2/2	1/2011	End Date: 3/16/2011
Active Datum: Level)	RKB @4,956.00ft (above Mea	n Sea UWI	: NBU 921-	25F1BS
Date	Time Duration Start-End (hr)	Phase Cod	e Sub Code	P/U MD From Operation (ft)
3/17/2011	7:00 -	33		7 AM FLBK REPORT: CP 3100#, TP 2350#, 20/64" CK, 50 BWPH, 1 CUP SAND, - GAS TTL BBLS RECOVERED: 2245 BBLS LEFT TO RECOVER: 7483
3/18/2011	7:00 -	33	Α	7 AM FLBK REPORT: CP 3150#, TP 2300#, 20/64" CK, 35 BWPH, TBSP SAND, - GAS TTL BBLS RECOVERED: 3295 BBLS LEFT TO RECOVER: 6433
3/19/2011	7:00 -	33	Α	7 AM FLBK REPORT: CP 2900#, TP 2200#, 20/64" CK, 25 BWPH, 1/2 TSP SAND, - GAS TTL BBLS RECOVERED: 4055 BBLS LEFT TO RECOVER: 5673
3/20/2011	7:00 -	33	Α	7 AM FLBK REPORT: CP 2750#, TP 2050#, 20/64" CK, 23 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 4627 BBLS LEFT TO RECOVER: 5101
	7:00 -	50		WELL IP'D ON 3/20/11 - 2574 MCFD, 0 BOPD, 92 BWPD, CP 2750#, FTP 2050#, CK 20/64", LP 338#, 24 HRS

4/20/2011

9:55:11AM

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 921-25F1BS-GREEN	Wellbore No.	ОН
Well Name	NBU 921-25F1BS	Common Name	NBU 921-25F1BS
Project	UTAH-UINTAH	Site	NBU 921-25F PAD
Vertical Section Azimuth	23.38 (°	North Reference	True
Origin N/S	0.0 (ft	Origin E/W	0.0 (ft)
Spud Date	11/5/2010	UWI	NBU 921-25F1BS
Active Datum	RKB @4,956.00ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: SURF. DEVIATION

Survey Name	SURF. DEVIATION	Company	WEATHERFORD
Started	11/5/2010	Ended	
Tool Name		Engineer	Anadarko

2.1.1 Tie On Point

MD (ft)	inc (°)	Azi T\ (°) (i	/D t)	스타스트 (基本) 하고 있는 다른 사람이 모르는 사람이 있다.	/W (ft)
21.00	0.00	0.00	21.00	0.00	0.00

2.1.2 Survey Stations

Date	Туре	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace
11/5/2010	Tie On	21.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00		
11/5/2010	NORMAL	249.00	1.19	346.57	248.98	2.30	-0.55	1.90	0.52	0.52	0.00	346.57
	NORMAL	334.00	2.61	340.94	333.93	4.99	-1.39	4.03	1.68	1.67	-6.62	-10.31
	NORMAL	424.00	3.75	338.97	423.79	9.67	-3.11	7.65	1.27	1.27	-2.19	-6.46
	NORMAL	514.00	5.25	340.30	513.51	16.30	-5.56	12.76	1.67	1.67	1.48	4.64
	NORMAL	604.00	5.63	342.57	603.11	24.39	-8.27	19.11	0.49	0.42	2.52	30.66
	NORMAL	694.00	7.44	340.07	692.52	34.08	-11.58	26.69	2.04	2.01	-2.78	-10.18
	NORMAL	784.00	9.19	340.69	781.57	46.34	-15.94	36.21	1.95	1.94	0.69	3.24
	NORMAL	874.00	10.63	341.19	870.23	60.98	-20.99	47.65	1.60	1.60	0.56	3.67
	NORMAL	964.00	11.86	341.85	958.50	77.63	-26.55	60.72	1.37	1.37	0.73	6.30
AND REPORT OF THE PARTY OF THE	NORMAL	1,054.00	12.69	348.07	1,046.44	96.09	-31.47	75.71	1.73	0.92	6.91	60.95
	NORMAL	1,144.00	13.50	354.44	1,134.11	116.22	-34.54	92.98	1.84	0.90	7.08	63.82
NATIONAL CONTRACTORS FOR	NORMAL	1,234.00	14.25	357.32	1,221.48	137.74	-36.07	112.12	1.13	0.83	3.20	44.04
OF THE PERSON NAMED IN COLUMN	NORMAL	1,324.00	15.27	1.01	1,308.51	160.65	-36.38	133.03	1.54	1.13	4.10	44.46
11/6/2010	NORMAL	1,414.00	16.00	6.82	1,395.19	184.82	-34.70	155.88	1.92	0.81	6.46	67.82
	NORMAL	1,504.00	16.94	13.44	1,481.50	209.89	-30.18	180.69	2.33	1.04	7.36	66.60
CONTRACTOR AND ADDRESS OF THE ADDRES	NORMAL	1,594.00	18.38	16.69	1,567.26	236.24	-23.06	207.70	1.94	1.60	3.61	35.96
	NORMAL	1,684.00	20.38	19.32	1,652.16	264.62	-13.79	237.43	2.42	2.22	2.92	24.82
	NORMAL	1,774.00	20.31	22.94	1,736.54	293.80	-2.52	268.68	1.40	-0.08	4.02	94.88
	NORMAL	1,864.00	20.12	27.71	1,821.01	321.89	10.77	299.74	1.84	-0.21	5.30	98.81
	NORMAL	1,954.00	19.81	30.82	1,905.60	348.69	25.78	330.30	1.23	-0.34	3.46	107.73

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
11/6/2010	NORMAL	2,044.00	20.69	29.69	1,990.04	375.60	41.47	361.22	1.07	0.98	-1.26	-24.49
	NORMAL	2,134.00	17.88	29.94	2,074.98	401.39	56.24	390.76	3.12	-3.12	0.28	178.43
	NORMAL	2,224.00	16.75	31.57	2,160.90	424.41	69.93	417.32	1.37	-1.26	1.81	157.54
	NORMAL	2,314.00	17.81	32.07	2,246.84	447.12	84.02	443.76	1.19	1.18	0.56	8.21
	NORMAL	2,404.00	19.32	31.26	2,332.15	471.51	99.06	472.12	1.70	1.68	-0.90	-10.08
	NORMAL	2,494.00	20.50	30.82	2,416.77	497.78	114.86	502.49	1.32	1.31	-0.49	-7.44
	NORMAL	2,584.00	19.44	30.69	2,501.36	524.19	130.58	532.97	1.18	-1.18	-0.14	-177.66
	NORMAL	2,674.00	18.06	29.19	2,586.58	549.25	145.03	561.71	1.62	-1.53	-1.67	-161.45
	NORMAL	2,704.00	17.60	29.72	2,615.14	557.25	149.54	570.84	1.63	-1.53	1.77	160.82

2.2 Survey Name: TIE IN

Survey Name	TIE IN	Company	SCIENTIFIC
Started	12/14/2010	Ended	
Tool Name	EM	Engineer	Anadarko

2.2.1 Tie On Point

	MD In (ft) (°		Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
Г	2,704.00	17.60	29.72	2,615.14	557.25	149.54

2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/14/2010	Tie On	2,704.00	17.60	29.72	2,615.14	557.25	149.54	570.84	0.00	0.00	0.00	0.00
12/14/2010	NORMAL	2,772.00	16.61	28.32	2,680.13	574.73	159.25	590.74	1.58	-1.46	-2.06	-158.08
	NORMAL	2,866.00	16.88	29.69	2,770.14	598.42	172.38	617.69	0.51	0.29	1.46	56.28
	NORMAL	2,960.00	18.73	32.41	2,859.64	623.02	187.23	646.17	2.16	1.97	2.89	25.51
	NORMAL	3,055.00	18.73	32.67	2,949.61	648.73	203.64	676.28	0.09	0.00	0.27	90.12
MACHINESCA MINISTERNAL STATE	NORMAL	3,149.00	18.29	31.80	3,038.75	673.97	219.56	705.77	0.55	-0.47	-0.93	-148.29
The state of the s	NORMAL	3,243.00	19.26	27.75	3,127.75	700.23	234.55	735.82	1.73	1.03	-4.31	-55.27
the cold a shift man	NORMAL	3,338.00	17.94	29.07	3,217.78	726.89	248.96	766.00	1.46	-1.39	1.39	162.93
	NORMAL	3,432.00	17.85	28.02	3,307.24	752.26	262.76	794.77	0.36	-0.10	-1.12	-106.09
office for annual of the first of the environment	NORMAL	3,526.00	17.76	26.87	3,396.73	777.76	276.01	823.43	0.39	-0.10	-1.22	-104.90
	NORMAL	3,621.00	15.92	28.54	3,487.66	802.14	288.78	850.88	2.00	-1.94	1.76	166.07
and the second of the second o	NORMAL	3,715.00	17.05	29.83	3,577.79	825.42	301.80	877.41	1.26	1.20	1.37	18.57
A	NORMAL	3,810.00	17.23	28.54	3,668.57	849.86	315.45	905.26	0.44	0.19	-1.36	-65.28
	NORMAL	3,904.00	16.88	28.28	3,758.44	874.11	328.56	932.72	0.38	-0.37	-0.28	-167.83
**************************************	NORMAL	3,998.00	17.50	28.02	3,848.24	898.60	341.67	960.41	0.66	0.66	-0.28	-7.19
12/15/2010	NORMAL	4,093.00	17.06	27.93	3,938.95	923.52	354.91	988.54	0.46	-0.46	-0.09	-176.57
	NORMAL	4,187.00	15.56	29.95	4,029.17	946.63	367.66	1,014.81	1.71	-1.60	2.15	160.25
	NORMAL	4,281.00	16.03	28.33	4,119.62	968.98	380.11	1,040.26	0.69	0.50	-1.72	-43.96
The same of the sa	NORMAL	4,376.00	16.97	29.33	4,210.70	992.61	393.13	1,067.12	1.03	0.99	1.05	17.29
	NORMAL	4,470.00	15.71	28.82	4,300.91	1,015.72	405.99	1,093.43	1.35	-1.34	-0.54	-173.75
	NORMAL	4,564.00	15.56	28.10	4,391.43	1,038.00	418.06	1,118.67	0.26	-0.16	-0.77	-128.05
	NORMAL	4,659.00	17.15	28.72	4,482.58	1,061.52	430.79	1,145.31	1.68	1.67	0.65	6.56
	NORMAL	4,753.00	16.27	28.02	4,572.61	1,085.30	443.64	1,172.24	0.96	-0.94	-0.74	-167.45
	NORMAL	4,847.00	14.07	27.14	4,663.33	1,107.09	455.04	1,196.77	2.35	-2.34	-0.94	-174.45
THE RESERVE OF THE PARTY OF THE PARTY.	NORMAL	4,942.00	13.01	24.24	4,755.69	1,127.12	464.69	1,218.98	1.32	-1.12	-3.05	-148.76
	NORMAL	5,036.00	12.97	23.56	4,847.28	1,146.44	473.26	1,240.11	0.17	-0.04	-0.72	-105.00
	NORMAL	5,131.00	11.43	23.89	4,940.13	1,164.82	481.33	1,260.18	1.62	-1.62	0.35	177.57
er erabet i i i i i annabati ber i anater i e	NORMAL	5,225.00	10.73	24.76	5,032.38	1,181.28	488.77	1,278.25	0.77	-0.74	0.93	166.99
	NORMAL	5,319.00	9.03	24.83	5,124.98	1,195.92	495.53	1,294.37	1.81	-1.81	0.07	179.63
man man or or or or or or or or	NORMAL	5,414.00	7.36	24.04	5,219.01	1,208.25	501.14	1,307.91	1.76	-1.76	-0.83	-176.53

2.2.2 Survey Stations (Continued)

Date	Type	MD (ft)	inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace
12/15/2010	NORMAL	5,508.00	4.57	28.28	5,312.49	1,217.04	505.37	1,317.66	3.00	-2.97	4.51	173.13
	NORMAL	5,603.00	2.29	37.33	5,407.32	1,221.89	508.31	1,323.28	2.46	-2.40	9.53	171.13
	NORMAL	5,697.00	0.35	5.03	5,501.29	1,223.67	509.48	1,325.37	2.13	-2.06	-34.36	-174.64
	NORMAL	5,791.00	0.14	9.16	5,595.29	1,224.07	509.52	1,325.75	0.22	-0.22	4.39	177.26
	NORMAL	5,886.00	0.18	274.02	5,690.29	1,224.19	509.39	1,325.82	0.25	0.04	-100.15	-131.05
	NORMAL	5,980.00	0.18	174.53	5,784.29	1,224.06	509.26	1,325.64	0.29	0.00	-105.84	-139.74
	NORMAL	6,074.00	0.44	176.02	5,878.29	1,223.55	509.29	1,325.19	0.28	0.28	1.59	2.52
12/16/2010	NORMAL	6,168.00	0.44	183.76	5,972.28	1,222.83	509.30	1,324.53	0.06	0.00	8.23	93.87
	NORMAL	6,263.00	0.72	305.10	6,067.28	1,222.81	508.78	1,324.31	1.07	0.29	127.73	142.95
Market Committee and Committee	NORMAL	6,357.00	0.82	273.59	6,161.27	1,223.19	507.63	1,324.20	0.46	0.11	-33.52	-92.79
	NORMAL	6,451.00	0.79	292.48	6,255.26	1,223.48	506.36	1,323.96	0.28	-0.03	20.10	105.84
w	NORMAL	6,546.00	0.62	236.49	6,350.26	1,223.45	505.33	1,323.52	0.71	-0.18	-58.94	-130.77
	NORMAL	6,640.00	1.14	223.66	6,444.25	1,222.49	504.26	1,322.22	0.59	0.55	-13.65	-27.25
	NORMAL	6,734.00	0.70	109.84	6,538.24	1,221.62	504.15	1,321.38	1.66	-0.47	-121.09	-155.76
	NORMAL	6,829.00	1.14	127.24	6,633.23	1,220.85	505.45	1,321.19	0.54	0.46	18.32	41.31
	NORMAL	6,923.00	0.09	95.96	6,727.22	1,220.27	506.27	1,320.98	1.13	-1.12	-33.28	-177.48
	NORMAL	7,017.00	0.26	84.71	6,821.22	1,220.29	506.55	1,321.11	0.18	0.18	-11.97	-17.09
	NORMAL	7,112.00	0.44	128.47	6,916.22	1,220.08	507.05	1,321.12	0.33	0.19	46.06	79.25
	NORMAL	7,206.00	0.44	134.98	7,010.21	1,219.60	507.59	1,320.89	0.05	0.00	6.93	93.25
	NORMAL	7,300.00	0.74	110.28	7,104.21	1,219.13	508.41	1,320.79	0.41	0.32	-26.28	-53.08
	NORMAL	7,395.00	0.53	39.71	7,199.21	1,219.26	509.27	1,321.24	0.79	-0.22	-74.28	-138.44
	NORMAL	7,489.00	1.38	4.98	7,293.19	1,220.72	509.65	1,322.73	1.05	0.90	-36.95	-52.46
12/17/2010		7,584.00	1.32	355.14	7,388.17	1,222.95	509.65	1,324.78	0.25	-0.06	-10.36	-109.39
12/11/2010	NORMAL	7,678.00	0.88	11.76	7,482.15	1,224.74	509.71	1,326.45	0.57	-0.47	17.68	152.17
	NORMAL	7,772.00	0.99	10.20	7,576.14	1,226.24	510.00	1,327.94	0.12	0.12	-1.66	-13.81
	NORMAL	7,867.00	0.62	3.85	7,671.13	1,227.56	510.18	1,329.23	0.40	-0.39	-6.68	-169.60
	NORMAL	7,961.00	0.38	56.67	7,765.12	1,228.24	510.47	1,329.97	0.53	-0.26	56.19	142.20
AT 11 1 MAY 1 1 MARKET AND 1 MARKET	NORMAL	8,055.00	0.62	45.37	7,859.12	1,228.77	511.10	1,330.70	0.27	0.26	-12.02	-28.05
	NORMAL	8,150.00	0.44	69.94	7,954.12	1,229.26	511.81	1,331.43	0.30	-0.19	25.86	140.23
	NORMAL	8,244.00	0.62	116.17	8,048.11	1,229.16	512.60	1,331.65	0.48	0.19	49.18	91.42
	NORMAL	8,339.00	0.62	109.93	8,143.11	1,228.75	513.55	1,331.66	0.07	make a common set of	-6.57	-93.12
	NORMAL	8,433.00	1.14	126.81	8,237.10	1,228.02	514.77	1,331.47	0.61	0.55	17.96	35.10
	NORMAL	8,527.00	0.79	153.00	8,331.08	1,226.88	515.81	1,330.84	0.59	-0.37	27.86	141.03
	NORMAL	8,622.00	0.73	103.60	8,426.08	1,226.20	516.54	1,330.50	0.63	-0.27	-52.00	-137.88
12/18/2010		8,716.00	0.79	114.94	8,520.07	1,225.82	517.55	1,330.55	0.31	0.28	12.06	32.42
12/10/2010	NORMAL	8,810.00	0.73	329.68	8,614.07	1,225.70	518.05	1,330.64	1.04	-0.61	-154.53	-172.64
	NORMAL	8,905.00	0.22	299.07	8,709.07	1,226.04	517.63	1,330.78	0.29	0.23	and the second of the second	-54.69
		9,003.00		108.35	8.807.07	1,226.04	517.52	1,330.78	0.23	-0.18	172.73	176.02
	NORMAL	- i ging geengagaa	0.26								a server reger processes of the	153.12
40/40/0040	NORMAL	9,097.00	0.35	241.85	8,901.06	1,225.95	517.47	1,330.64	0.60 0.46		gara in arguman di	-113.29
12/19/2010	Access to the second of the second	9,192.00	0.44	175.50	8,996.06	1,225.45	517.24	1,330.09	0.40	0.09	production of the control of the	-19.28
	NORMAL	9,286.00	0.70	168.20	9,090.06	1,224.53	517.38	1,329.30	called and the second attention of them. I	management of the second of the con-	Commence of the commence of	A CONTRACTOR OF THE STREET, AND WINDOWS
	NORMAL	9,381.00	1.06	150.36	9,185.05	1,223.19	517.94 510.05	1,328.29	a process of the contract of		secretary of the second of the	-46.42 -14.13
	NORMAL	9,475.00	1.49	146.23	9,279.02	1,221.42	519.05	1,327.11	0.47	and the second second		
	NORMAL	9,569.00	1.41	137.77	9,372.99	1,219.55	520.50	1,325.97	The state of the state of the state of		by the second of the second of the second of	-114.69
	NORMAL	9,664.00	1.23	135.77	9,467.97	1,217.95	522.00	1,325.10	at the common of the control of the control of		and the state of the section is	-166.64
	NORMAL	9,758.00	0.88	153.61	9,561.95	1,216.58	523.03	1,324.25	A CARLO MAN THE STATE OF THE ST		and the second second second	145.50
	NORMAL	9,853.00	0.97	150.97	9,656.94	1,215.23	523.74	1,323.28	0.10	and a serie members to	The same of the sa	-26.66
	NORMAL	9,901.00	1.06	154.59	9,704.93	1,214.47	524.13	1,322.74		many and an extension of the same of	and the second of the second second	37.29
	NORMAL	9,955.00	1.06	154.59	9,758.92	1,213.57	524.56	1,322.09	0.00	0.00	0.00	0.00